# T110 Axial MIL–PRF–39003 Polar Type and T212 (CSR13 Style)

## Overview

The KEMET standard hermetically sealed T110 Series is targeted for use in high humidity environments. These capacitors are ruggedly built, designed for miniaturized circuitry, and are especially well-suited for coupling, bypass, filtering and RC timing circuits. The T110 Series exhibits excellent stability as well as extremely low DC leakage current, dissipation factor, and ESR/impedance over a wide temperature and frequency range. Available in standard EIA capacitance values from 0.0047 µF to 330 µF in ±20%, ±10%, and ±5% tolerances, the T110 Series is now offered in working voltages of 6 VDC to 125 VDC and low ESR limits. Higher CV values in comparable case sizes are available in the KEMET T410 Series.

## Benefits

- Taped and reeled per EIA Specification RS–296
- Marking per MIL–STD–1285
- Qualified to MIL–PRF–39003 (CSR13 Style)
- Failure rate options: Graded – B, C, D, and G
  Exponential – M, P, R, and S*
- Capacitance values of 0.0047 µF to 330 µF
- Tolerances of ±5%, ±10% and ±20%
- Voltage rating of 6 – 125 VDC
- Operating temperature range of −55°C to +125°C
- Case sizes: A, B, C, D

**Failure rates apply to military products only*




## Applications

Typical applications include coupling, bypass, filtering and RC timing circuits in miniaturized circuitry.



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## Ordering Information – T110

| T | 110 | A | 105 | K | 050 | A | T | 7200 |
|---|---|---|---|---|---|---|---|---|
| Capacitor Class | Series | Case Size | Capacitance Code (pF) | Capacitance Tolerance | Rated Voltage (VDC) | Failure Rate/Military Product Only | Termination Finish | Specification |
| T = Tantalum | Hermetically sealed axial capacitor | A<br>B<br>C<br>D | First two digits represent significant figures. Third digit specifies number of zeros. | J = ±5%<br>K = ±10%<br>M = ±20% | 006 = 6<br>010 = 10<br>015 = 15<br>020 = 20<br>035 = 35<br>050 = 50<br>060 = 60<br>075 = 75<br>100 = 100<br>125 = 125 | A = N/A | T = 100% Tin<br>S = Standard (Sn/Pb) | Blank = Sleeved/ Bulk<br>0100 = Without sleeve<br>7200 = Tape & Reel<br>7293 & 7443 = Ammo<br><br>All capacitors are sleeved unless specified. |

## Ordering Information – T212 (CSR13 Style)

MIL product

| T | 212 | A | 105 | K | 050 | B | S | 7200 |
|---|---|---|---|---|---|---|---|---|
| Capacitor Class | Series | Case Size | Capacitance Code (pF) | Capacitance Tolerance | Rated Voltage (VDC) | Failure Rate/Military Product Only | Termination Finish | Specification |
| T = Tantalum | Hermetically sealed axial military grade capacitor | A<br>B<br>C<br>D | First two digits represent significant figures. Third digit specifies number of zeros. | J = ±5%<br>K = ±10%<br>M = ±20% | 006 = 6<br>010 = 10<br>015 = 15<br>020 = 20<br>035 = 35<br>050 = 50<br>075 = 75<br>100 = 100 | Graded:<br>B = 0.1%/k hours<br>C = 0.01%/k hours<br>D = 0.001%/k hours<br>G= 1.0 %/k hours<br>Exponential:<br>M = 1%/k hours<br>P = 0.1%/k hours<br>R = 0.01%/k hours<br>S = 0.001%/k hours | S = Standard (Sn/Pb) | All capacitors are sleeved unless specified.<br>0100 = Without sleeve<br>7200 = Tape & Reel<br>7293 & 7443 = Ammo<br>4250 = "A" surge current<br>4251 = "B" surge current<br>4252 = "C" surge current |

## Ordering Information – MIL–PRF–39003

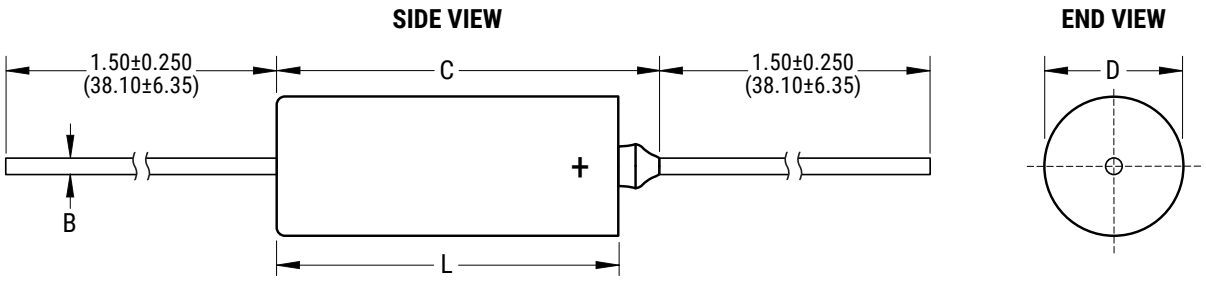
| M39003 | /01 | 6003 | A |
|---|---|---|---|
| Capacitor Class | Slash | Dash Number | Surge Option |
| Military specification number | Specification sheet number | Failure rate level | A = C-4250<br>B = C-4251<br>C = C-4252<br>Blank = No surge |

*Orders should be entered by the military specification number, including the dash number and surge option letter (A, B or C).*

## Performance Characteristics

| Item | Performance Characteristics |
|---|---|
| Operating Temperature | –55°C to 125°C |
| Rated Capacitance Range | 0.0047 – 330 µF at 120 Hz/25°C |
| Capacitance Tolerance | J Tolerance (5%), K Tolerance (10%), M Tolerance (20%) |
| Rated Voltage Range | 6 – 125 V |
| DF (120 Hz at 25°C) | Refer to Part Number Electrical Specification Table |
| Leakage Current | Refer to Part Number Electrical Specification Table<br>(At rated voltage up to +85°C and 2/3 of rated voltage applied at 125°C) |
| Failure Rate (MIL–39003, CSR13 capacitors only) | Approved failure rate: S (0.001%/k hours) – Exponential, D (0.001%/k hours) and C (0.01%/k hours) – Graded |

## Dimensions – Inches (Millimeters)




| Case Size | Uninsulated | | Insulated | | | |
|---|---|---|---|---|---|---|
| | D ±0.005 (±0.13) | L ±0.031 (±0.79) | D ±0.010 (±0.25) | L ±0.031 (±0.79) | B ±0.002 (±0.05) | C Maximum |
| A | 0.125 (3.18) | 0.250 (6.35) | 0.135 (3.43) | 0.286 (7.26) | 0.020 (0.51) | 0.422 (10.72) |
| B | 0.175 (4.45) | 0.438 (11.13) | 0.185 (4.70) | 0.474 (12.04) | 0.020 (0.51) | 0.610 (15.49) |
| C | 0.279 (7.09) | 0.650 (16.51) | 0.289 (7.34) | 0.686 (17.42) | 0.025 (0.64) | 0.822 (20.88) |
| D | 0.341 (8.66) | 0.750 (19.05) | 0.351 (8.92) | 0.786 (19.96) | 0.025 (0.64) | 0.922 (23.42) |

## Table 1 – Ratings & Part Number Reference

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 6 | 2.2 | A | T110A225(1)006A(3) | 0.3 | 4 | | | | | | | | | |
| 6 | 2.7 | A | T110A275(1)006A(3) | 0.3 | 4 | | | | | | | | | |
| 6 | 3.3 | A | T110A335(1)006A(3) | 0.3 | 4 | | | | | | | | | |
| 6 | 3.9 | A | T110A395(1)006A(3) | 0.3 | 4 | | | | | | | | | |
| 6 | 4.7 | A | T110A475(1)006A(3) | 0.3 | 4 | | | | | | | | | |
| 6 | 5.6 | A | T110A565J006A(3) | 0.3 | 4 | 5001 | 5201 | 5401 | 5601 | 4001 | 6001 | 7001 | 8001 | T212A565J006(2)S |
| 6 | 5.6 | A | T110A565K006A(3) | 0.3 | 4 | 2241 | 2481 | 2721 | 2961 | 4002 | 6002 | 7002 | 8002 | T212A565K006(2)S |
| 6 | 5.6 | A | T110A565M006A(3) | 0.3 | 4 | | | | | | | | | |
| 6 | 6.8 | A | T110A685J006A(3) | 0.3 | 6 | 5002 | 5202 | 5402 | 5602 | 4003 | 6003 | 7003 | 8003 | T212A685J006(2)S |
| 6 | 6.8 | A | T110A685K006A(3) | 0.3 | 6 | 2242 | 2482 | 2722 | 2962 | 4004 | 6004 | 7004 | 8004 | T212A685K006(2)S |
| 6 | 6.8 | A | T110A685M006A(3) | 0.3 | 6 | 2243 | 2483 | 2723 | 2963 | 4005 | 6005 | 7005 | 8005 | T212A685M006(2)S |
| 6 | 8.2 | B | T110B825(1)006A(3) | 0.3 | 6 | | | | | | | | | |
| 6 | 10.0 | B | T110B106(1)006A(3) | 0.3 | 6 | | | | | | | | | |
| 6 | 12.0 | B | T110B126(1)006A(3) | 0.5 | 6 | | | | | | | | | |
| 6 | 15.0 | B | T110B156(1)006A(3) | 0.9 | 6 | | | | | | | | | |
| 6 | 18.0 | B | T110B186(1)006A(3) | 0.9 | 6 | | | | | | | | | |
| 6 | 22.0 | B | T110B226(1)006A(3) | 0.9 | 6 | | | | | | | | | |
| 6 | 27.0 | B | T110B276(1)006A(3) | 0.9 | 6 | | | | | | | | | |
| 6 | 33.0 | B | T110B336(1)006A(3) | 0.9 | 6 | | | | | | | | | |
| 6 | 39.0 | B | T110B396(1)006A(3) | 0.9 | 6 | | | | | | | | | |
| 6 | 47.0 | B | T110B476J006A(3) | 1.5 | 6 | 5003 | 5203 | 5403 | 5603 | 4006 | 6006 | 7006 | 8006 | T212B476J006(2)S |
| 6 | 47.0 | B | T110B476K006A(3) | 1.5 | 6 | 2244 | 2484 | 2724 | 2964 | 4007 | 6007 | 7007 | 8007 | T212B476K006(2)S |
| 6 | 47.0 | B | T110B476M006A(3) | 1.5 | 6 | 2245 | 2485 | 2725 | 2965 | 4008 | 6008 | 7008 | 8008 | T212B476M006(2)S |
| 6 | 56.0 | B | T110B566J006A(3) | 1.5 | 6 | 5004 | 5204 | 5404 | 5604 | 4009 | 6009 | 7009 | 8009 | T212B566J006(2)S |
| 6 | 56.0 | B | T110B566K006A(3) | 1.5 | 6 | 2246 | 2486 | 2726 | 2966 | 4010 | 6010 | 7010 | 8010 | T212B566K006(2)S |
| 6 | 56.0 | B | T110B566M006A(3) | 1.5 | 6 | | | | | | | | | |
| 6 | 68.0 | C | T110C686(1)006A(3) | 3.0 | 6 | | | | | | | | | |
| 6 | 82.0 | C | T110C826(1)006A(3) | 3.0 | 6 | | | | | | | | | |
| 6 | 100.0 | C | T110C107(1)006A(3) | 3.0 | 6 | | | | | | | | | |
| 6 | 120.0 | C | T110C127(1)006A(3) | 3.0 | 6 | | | | | | | | | |
| 6 | 150.0 | C | T110C157J006A(3) | 4.5 | 6 | 5005 | 5205 | 5405 | 5605 | 4011 | 6011 | 7011 | 8011 | T212C157J006(2)S |
| 6 | 150.0 | C | T110C157K006A(3) | 4.5 | 6 | 2247 | 2487 | 2727 | 2967 | 4012 | 6012 | 7012 | 8012 | T212C157K006(2)S |
| 6 | 150.0 | C | T110C157M006A(3) | 4.5 | 6 | 2248 | 2488 | 2728 | 2968 | 4013 | 6013 | 7013 | 8013 | T212C157M006(2)S |
| 6 | 180.0 | C | T110C187J006A(3) | 5.5 | 6 | 5006 | 5206 | 5406 | 5606 | 4014 | 6014 | 7014 | 8014 | T212C187J006(2)S |
| 6 | 180.0 | C | T110C187K006A(3) | 5.5 | 6 | 2249 | 2489 | 2729 | 2969 | 4015 | 6015 | 7015 | 8015 | T212C187K006(2)S |
| 6 | 180.0 | C | T110C187M006A(3) | 5.5 | 6 | | | | | | | | | |
| 6 | 220.0 | D | T110D227(1)006A(3) | 6.0 | 8 | | | | | | | | | |
| 6 | 270.0 | D | T110D277J006A(3) | 6.0 | 8 | 5007 | 5207 | 5407 | 5607 | 4016 | 6016 | 7016 | 8016 | T212D277J006(2)S |
| 6 | 270.0 | D | T110D277K006A(3) | 6.0 | 8 | 2250 | 2490 | 2730 | 2970 | 4017 | 6017 | 7017 | 8017 | T212D277K006(2)S |
| 6 | 270.0 | D | T110D277M006A(3) | 6.0 | 8 | | | | | | | | | |
| 6 | 330.0 | D | T110D337J006A(3) | 7.5 | 8 | 5008 | 5208 | 5408 | 5608 | 4018 | 6018 | 7018 | 8018 | T212D337J006(2)S |
| 6 | 330.0 | D | T110D337K006A(3) | 7.5 | 8 | 2251 | 2491 | 2731 | 2971 | 4019 | 6019 | 7019 | 8019 | T212D337K006(2)S |
| 6 | 330.0 | D | T110D337M006A(3) | 7.5 | 8 | 2252 | 2492 | 2732 | 2972 | 4020 | 6020 | 7020 | 8020 | T212D337M006(2)S |
| 10 | 1.0 | A | T110A105(1)010A(3) | 0.3 | 3 | | | | | | | | | |
| 10 | 1.2 | A | T110A125(1)010A(3) | 0.3 | 4 | | | | | | | | | |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish. Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 10 | 1.5 | A | T110A155(1)010A(3) | 0.3 | 4 | | | | | | | | | |
| 10 | 1.8 | A | T110A185(1)010A(3) | 0.3 | 4 | | | | | | | | | |
| 10 | 2.2 | A | T110A225(1)010A(3) | 0.3 | 4 | | | | | | | | | |
| 10 | 2.7 | A | T110A275(1)010A(3) | 0.3 | 4 | | | | | | | | | |
| 10 | 3.3 | A | T110A335(1)010A(3) | 0.3 | 4 | | | | | | | | | |
| 10 | 3.9 | A | T110A395J010A(3) | 0.3 | 4 | 5009 | 5209 | 5409 | 5609 | 4021 | 6021 | 7021 | 8021 | T212A395J010(2)S |
| 10 | 3.9 | A | T110A395K010A(3) | 0.3 | 4 | 2253 | 2493 | 2733 | 2973 | 4022 | 6022 | 7022 | 8022 | T212A395K010(2)S |
| 10 | 3.9 | A | T110A395M010A(3) | 0.3 | 4 | | | | | | | | | |
| 10 | 4.7 | A | T110A475J010A(3) | 0.4 | 4 | 5010 | 5210 | 5410 | 5610 | 4023 | 6023 | 7023 | 8023 | T212A475J010(2)S |
| 10 | 4.7 | A | T110A475K010A(3) | 0.4 | 4 | 2254 | 2494 | 2734 | 2974 | 4024 | 6024 | 7024 | 8024 | T212A475K010(2)S |
| 10 | 4.7 | A | T110A475M010A(3) | 0.4 | 4 | 2255 | 2495 | 2735 | 2975 | 4025 | 6025 | 7025 | 8025 | T212A475M010(2)S |
| 10 | 5.6 | B | T110B565(1)010A(3) | 0.4 | 4 | | | | | | | | | |
| 10 | 6.8 | B | T110B685(1)010A(3) | 1.0 | 6 | | | | | | | | | |
| 10 | 8.2 | B | T110B825(1)010A(3) | 1.0 | 6 | | | | | | | | | |
| 10 | 10.0 | B | T110B106(1)010A(3) | 1.0 | 6 | | | | | | | | | |
| 10 | 12.0 | B | T110B126(1)010A(3) | 1.0 | 6 | | | | | | | | | |
| 10 | 15.0 | B | T110B156(1)010A(3) | 1.0 | 6 | | | | | | | | | |
| 10 | 18.0 | B | T110B186(1)010A(3) | 1.0 | 6 | | | | | | | | | |
| 10 | 22.0 | B | T110B226(1)010A(3) | 2.0 | 6 | | | | | | | | | |
| 10 | 27.0 | B | T110B276J010A(3) | 2.0 | 6 | 5011 | 5211 | 5411 | 5611 | 4026 | 6026 | 7026 | 8026 | T212B276J010(2)S |
| 10 | 27.0 | B | T110B276K010(3) | 2.0 | 6 | 2256 | 2496 | 2736 | 2976 | 4027 | 6027 | 7027 | 8027 | T212B276K010(2)S |
| 10 | 27.0 | B | T110B276M010A(3) | 2.0 | 6 | | | | | | | | | |
| 10 | 33.0 | B | T110B336J010A(3) | 2.0 | 6 | 5012 | 5212 | 5412 | 5612 | 4028 | 6028 | 7028 | 8028 | T212B336J010(2)S |
| 10 | 33.0 | B | T110B336K010A(3) | 2.0 | 6 | 2257 | 2497 | 2737 | 2977 | 4029 | 6029 | 7029 | 8029 | T212B336K010(2)S |
| 10 | 33.0 | B | T110B336M010A(3) | 2.0 | 6 | 2258 | 2498 | 2738 | 2978 | 4030 | 6030 | 7030 | 8030 | T212B336M010(2)S |
| 10 | 39.0 | B | T110B396J010A(3) | 2.0 | 6 | 5013 | 5213 | 5413 | 5613 | 4031 | 6031 | 7031 | 8031 | T212B396J010(2)S |
| 10 | 39.0 | B | T110B396K010A(3) | 2.0 | 6 | 2259 | 2499 | 2739 | 2979 | 4032 | 6032 | 7032 | 8032 | T212B396K010(2)S |
| 10 | 39.0 | B | T110B396M010A(3) | 2.0 | 6 | | | | | | | | | |
| 10 | 47.0 | C | T110C476(1)010A(3) | 3.0 | 6 | | | | | | | | | |
| 10 | 56.0 | C | T110C566(1)010A(3) | 3.0 | 6 | | | | | | | | | |
| 10 | 68.0 | C | T110C686(1)010A(3) | 3.0 | 6 | | | | | | | | | |
| 10 | 82.0 | C | T110C826J010A(3) | 3.0 | 6 | 5014 | 5214 | 5414 | 5614 | 4033 | 6033 | 7033 | 8033 | T212C826J010(2)S |
| 10 | 82.0 | C | T110C826K010A(3) | 3.0 | 6 | 2260 | 2500 | 2740 | 2980 | 4034 | 6034 | 7034 | 8034 | T212C826K010(2)S |
| 10 | 82.0 | C | T110C826M010A(3) | 3.0 | 6 | | | | | | | | | |
| 10 | 100.0 | C | T110C107J010AS | 5.0 | 6 | 5015 | 5215 | 5415 | 5615 | 4035 | 6035 | 7035 | 8035 | T212C107J010(2)S |
| 10 | 100.0 | C | T110C107K010AS | 5.0 | 6 | 2261 | 2501 | 2741 | 2981 | 4036 | 6036 | 7036 | 8036 | T212C107K010(2)S |
| 10 | 100.0 | C | T110C107M010AS | 5.0 | 6 | 2262 | 2502 | 2742 | 2982 | 4037 | 6037 | 7037 | 8037 | T212C107M010(2)S |
| 10 | 120.0 | C | T110C127J010AS | 6.0 | 6 | 5016 | 5216 | 5416 | 5616 | 4038 | 6038 | 7038 | 8038 | T212C127J010(2)S |
| 10 | 120.0 | C | T110C127K010A(3) | 6.0 | 6 | 2263 | 2503 | 2743 | 2983 | 4039 | 6039 | 7039 | 8039 | T212C127K010(2)S |
| 10 | 120.0 | C | T110C127M010A(3) | 6.0 | 6 | | | | | | | | | |
| 10 | 150.0 | D | T110D157(1)010A(3) | 9.0 | 6 | | | | | | | | | |
| 10 | 180.0 | D | T110D187J010A(3) | 9.0 | 6 | 5017 | 5217 | 5417 | 5617 | 4040 | 6040 | 7040 | 8040 | T212D187J010(2)S |
| 10 | 180.0 | D | T110D187K010A(3) | 9.0 | 6 | 2264 | 2504 | 2744 | 2984 | 4041 | 6041 | 7041 | 8041 | T212D187K010(2)S |
| 10 | 180.0 | D | T110D187M010A(3) | 9.0 | 6 | | | | | | | | | |
| 10 | 220.0 | D | T110D227J010A(3) | 10.0 | 8 | 5018 | 5218 | 5418 | 5618 | 4042 | 6042 | 7042 | 8042 | T212D227J010(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 10 | 220.0 | D | T110D227K010A(3) | 10.0 | 8 | 2265 | 2505 | 2745 | 2985 | 4043 | 6043 | 7043 | 8043 | T212D227K010(2)S |
| 10 | 220.0 | D | T110D227M010A(3) | 10.0 | 8 | 2266 | 2506 | 2746 | 2986 | 4044 | 6044 | 7044 | 8044 | T212D227M010(2)S |
| 15 | 0.33 | A | T110A334(1)015A(3) | 0.3 | 3 | | | | | | | | | |
| 15 | 0.39 | A | T110A394(1)015A(3) | 0.3 | 3 | | | | | | | | | |
| 15 | 0.47 | A | T110A474(1)015A(3) | 0.3 | 3 | | | | | | | | | |
| 15 | 0.56 | A | T110A564(1)015A(3) | 0.3 | 3 | | | | | | | | | |
| 15 | 0.68 | A | T110A684(1)015A(3) | 0.3 | 3 | | | | | | | | | |
| 15 | 1.0 | A | T110A105(1)015A(3) | 0.3 | 3 | | | | | | | | | |
| 15 | 1.2 | A | T110A125(1)015A(3) | 0.3 | 3 | | | | | | | | | |
| 15 | 1.5 | A | T110A155(1)015A(3) | 0.3 | 4 | | | | | | | | | |
| 15 | 1.8 | A | T110A185(1)015A(3) | 0.3 | 4 | | | | | | | | | |
| 15 | 2.2 | A | T110A225(1)015A(3) | 0.3 | 4 | | | | | | | | | |
| 15 | 2.7 | A | T110A275J015A(3) | 0.3 | 4 | 5019 | 5219 | 5419 | 5619 | 4045 | 6045 | 7045 | 8045 | T212A275J015(2)S |
| 15 | 2.7 | A | T110A275K015A(3) | 0.3 | 4 | 2267 | 2507 | 2747 | 2987 | 4046 | 6046 | 7046 | 8046 | T212A275K015(2)S |
| 15 | 2.7 | A | T110A275M015A(3) | 0.3 | 4 | | | | | | | | | |
| 15 | 3.3 | A | T110A335J015A(3) | 0.4 | 4 | 5020 | 5220 | 5420 | 5620 | 4047 | 6047 | 7047 | 8047 | T212A335J015(2)S |
| 15 | 3.3 | A | T110A335K015A(3) | 0.4 | 4 | 2268 | 2508 | 2748 | 2988 | 4048 | 6048 | 7048 | 8048 | T212A335K015(2)S |
| 15 | 3.3 | A | T110A335M015A(3) | 0.4 | 4 | 2269 | 2509 | 2749 | 2989 | 4049 | 6049 | 7049 | 8049 | T212A335M015(2)S |
| 15 | 3.9 | B | T110B395(1)015A(3) | 0.4 | 4 | | | | | | | | | |
| 15 | 4.7 | B | T110B475(1)015A(3) | 0.7 | 4 | | | | | | | | | |
| 15 | 5.6 | B | T110B565(1)015A(3) | 0.7 | 4 | | | | | | | | | |
| 15 | 6.8 | B | T110B685(1)015A(3) | 0.7 | 6 | | | | | | | | | |
| 15 | 8.2 | B | T110B825(1)015A(3) | 0.7 | 6 | | | | | | | | | |
| 15 | 10.0 | B | T110B106(1)015A(3) | 1.0 | 6 | | | | | | | | | |
| 15 | 12.0 | B | T110B126(1)015A(3) | 1.0 | 6 | | | | | | | | | |
| 15 | 15.0 | B | T110B156(1)015A(3) | 2.0 | 6 | | | | | | | | | |
| 15 | 18.0 | B | T110B186J015A(3) | 2.0 | 6 | 5021 | 5221 | 5421 | 5621 | 4050 | 6050 | 7050 | 8050 | T212B186J015(2)S |
| 15 | 18.0 | B | T110B186K015A(3) | 2.0 | 6 | 2270 | 2510 | 2750 | 2990 | 4051 | 6051 | 7051 | 8051 | T212B186K015(2)S |
| 15 | 18.0 | B | T110B186M015A(3) | 2.0 | 6 | | | | | | | | | |
| 15 | 22.0 | B | T110B226J015A(3) | 2.0 | 6 | 5022 | 5222 | 5422 | 5622 | 4052 | 6052 | 7052 | 8052 | T212B226J015(2)S |
| 15 | 22.0 | B | T110B226K015A(3) | 2.0 | 6 | 2271 | 2511 | 2751 | 2991 | 4053 | 6053 | 7053 | 8053 | T212B226K015(2)S |
| 15 | 22.0 | B | T110B226M015A(3) | 2.0 | 6 | 2272 | 2512 | 2752 | 2992 | 4054 | 6054 | 7054 | 8054 | T212B226M015(2)S |
| 15 | 27.0 | C | T110C276(1)015A(3) | 3.0 | 6 | | | | | | | | | |
| 15 | 33.0 | C | T110C336(1)015A(3) | 3.0 | 6 | | | | | | | | | |
| 15 | 39.0 | C | T110C396(1)015A(3) | 3.0 | 6 | | | | | | | | | |
| 15 | 47.0 | C | T110C476(1)015A(3) | 4.0 | 6 | | | | | | | | | |
| 15 | 56.0 | C | T110C566J015A(3) | 4.0 | 6 | 5023 | 5223 | 5423 | 5623 | 4055 | 6055 | 7055 | 8055 | T212C566J015(2)S |
| 15 | 56.0 | C | T110C566K015A(3) | 4.0 | 6 | 2273 | 2513 | 2753 | 2993 | 4056 | 6056 | 7056 | 8056 | T212C566K015(2)S |
| 15 | 56.0 | C | T110C566M015A(3) | 4.0 | 6 | | | | | | | | | |
| 15 | 68.0 | C | T110C686J015A(3) | 5.0 | 6 | 5024 | 5224 | 5424 | 5624 | 4057 | 6057 | 7057 | 8057 | T212C686J015(2)S |
| 15 | 68.0 | C | T110C686K015A(3) | 5.0 | 6 | 2274 | 2514 | 2754 | 2994 | 4058 | 6058 | 7058 | 8058 | T212C686K015(2)S |
| 15 | 68.0 | C | T110C686M015A(3) | 5.0 | 6 | 2275 | 2515 | 2755 | 2995 | 4059 | 6059 | 7059 | 8059 | T212C686M015(2)S |
| 15 | 82.0 | D | T110D826(1)015A(3) | 6.0 | 6 | | | | | | | | | |
| 15 | 100.0 | D | T110D107(1)015A(3) | 6.0 | 6 | | | | | | | | | |
| 15 | 120.0 | D | T110D127J015A(3) | 6.0 | 6 | 5025 | 5225 | 5425 | 5625 | 4060 | 6060 | 7060 | 8060 | T212D127J015(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 15 | 120.0 | D | T110D127K015A(3) | 6.0 | 6 | 2276 | 2516 | 2756 | 2996 | 4061 | 6061 | 7061 | 8061 | T212D127K015(2)S |
| 15 | 120.0 | D | T110D127M015A(3) | 6.0 | 6 | | | | | | | | | |
| 15 | 150.0 | D | T110D157J015A(3) | 8.0 | 6 | 5026 | 5226 | 5426 | 5626 | 4062 | 6062 | 7062 | 8062 | T212D157J015(2)S |
| 15 | 150.0 | D | T110D157K015A(3) | 8.0 | 6 | 2277 | 2517 | 2757 | 2997 | 4063 | 6063 | 7063 | 8063 | T212D157K015(2)S |
| 15 | 150.0 | D | T110D157M015A(3) | 8.0 | 6 | 2278 | 2518 | 2758 | 2998 | 4064 | 6064 | 7064 | 8064 | T212D157M015(2)S |
| 20 | 0.047 | A | T110A473(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.056 | A | T110A563(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.068 | A | T110A683(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.082 | A | T110A823(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.10 | A | T110A104(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.12 | A | T110A124(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.15 | A | T110A154(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.18 | A | T110A184(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.22 | A | T110A224(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.27 | A | T110A274(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.33 | A | T110A334(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.39 | A | T110A394(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.47 | A | T110A474(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.56 | A | T110A564(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.68 | A | T110A684(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 0.82 | A | T110A824(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 1.0 | A | T110A105(1)020A(3) | 0.3 | 3 | | | | | | | | | |
| 20 | 1.2 | A | T110A125J020A(3) | 0.3 | 4 | 5027 | 5227 | 5427 | 5627 | 4065 | 6065 | 7065 | 8065 | T212A125J020(2)S |
| 20 | 1.2 | A | T110A125K020A(3) | 0.3 | 4 | 2279 | 2519 | 2759 | 2999 | 4066 | 6066 | 7066 | 8066 | T212A125K020(2)S |
| 20 | 1.2 | A | T110A125M020A(3) | 0.3 | 4 | | | | | | | | | |
| 20 | 1.5 | A | T110A155J020A(3) | 0.3 | 4 | 5028 | 5228 | 5428 | 5628 | 4067 | 6067 | 7067 | 8067 | T212A155J020(2)S |
| 20 | 1.5 | A | T110A155K020A(3) | 0.3 | 4 | 2280 | 2520 | 2760 | 3000 | 4068 | 6068 | 7068 | 8068 | T212A155K020(2)S |
| 20 | 1.5 | A | T110A155M020A(3) | 0.3 | 4 | 2281 | 2521 | 2761 | 3001 | 4069 | 6069 | 7069 | 8069 | T212A155M020(2)S |
| 20 | 1.8 | A | T110A185J020A(3) | 0.3 | 4 | 5029 | 5229 | 5429 | 5629 | 4070 | 6070 | 7070 | 8070 | T212A185J020(2)S |
| 20 | 1.8 | A | T110A185K020A(3) | 0.3 | 4 | 2282 | 2522 | 2762 | 3002 | 4071 | 6071 | 7071 | 8071 | T212A185K020(2)S |
| 20 | 1.8 | A | T110A185M020A(3) | 0.3 | 4 | | | | | | | | | |
| 20 | 2.2 | A | T110A225J020A(3) | 0.4 | 4 | 5030 | 5230 | 5430 | 5630 | 4072 | 6072 | 7072 | 8072 | T212A225J020(2)S |
| 20 | 2.2 | A | T110A225K020A(3) | 0.4 | 4 | 2283 | 2523 | 2763 | 3003 | 4073 | 6073 | 7073 | 8073 | T212A225K020(2)S |
| 20 | 2.2 | A | T110A225M020A(3) | 0.4 | 4 | 2284 | 2524 | 2764 | 3004 | 4074 | 6074 | 7074 | 8074 | T212A225M020(2)S |
| 20 | 2.7 | B | T110B275(1)020A(3) | 0.5 | 4 | | | | | | | | | |
| 20 | 3.3 | B | T110B335(1)020A(3) | 1.0 | 4 | | | | | | | | | |
| 20 | 3.9 | B | T110B395(1)020A(3) | 1.0 | 4 | | | | | | | | | |
| 20 | 4.7 | B | T110B475(1)020A(3) | 1.0 | 4 | | | | | | | | | |
| 20 | 5.6 | B | T110B565(1)020A(3) | 1.0 | 4 | | | | | | | | | |
| 20 | 6.8 | B | T110B685(1)020A(3) | 1.0 | 4 | | | | | | | | | |
| 20 | 8.2 | B | T110B825J020A(3) | 1.0 | 6 | 5031 | 5231 | 5431 | 5631 | 4075 | 6075 | 7075 | 8075 | T212B825J020(2)S |
| 20 | 8.2 | B | T110B825K020A(3) | 1.0 | 6 | 2285 | 2525 | 2765 | 3005 | 4076 | 6076 | 7076 | 8076 | T212B825K020(2)S |
| 20 | 8.2 | B | T110B825M020A(3) | 1.0 | 6 | | | | | | | | | |
| 20 | 10.0 | B | T110B106J020A(3) | 1.0 | 6 | 5032 | 5232 | 5432 | 5632 | 4077 | 6077 | 7077 | 8077 | T212B106J020(2)S |
| 20 | 10.0 | B | T110B106K020A(3) | 1.0 | 6 | 2286 | 2526 | 2766 | 3006 | 4078 | 6078 | 7078 | 8078 | T212B106K020(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 20 | 10.0 | B | T110B106M020A(3) | 1.0 | 6 | 2287 | 2527 | 2767 | 3007 | 4079 | 6079 | 7079 | 8079 | T212B106M020(2)S |
| 20 | 12.0 | B | T110B126J020A(3) | 1.0 | 6 | 5033 | 5233 | 5433 | 5633 | 4080 | 6080 | 7080 | 8080 | T212B126J020(2)S |
| 20 | 12.0 | B | T110B126K020A(3) | 1.0 | 6 | 2288 | 2528 | 2768 | 3008 | 4081 | 6081 | 7081 | 8081 | T212B126K020(2)S |
| 20 | 12.0 | B | T110B126M020A(3) | 1.0 | 6 | | | | | | | | | |
| 20 | 15.0 | B | T110B156J020A(3) | 2.0 | 6 | 5034 | 5234 | 5434 | 5634 | 4082 | 6082 | 7082 | 8082 | T212B156J020(2)S |
| 20 | 15.0 | B | T110B156K020A(3) | 2.0 | 6 | 2289 | 2529 | 2769 | 3009 | 4083 | 6083 | 7083 | 8083 | T212B156K020(2)S |
| 20 | 15.0 | B | T110B156M020A(3) | 2.0 | 6 | 2290 | 2530 | 2770 | 3010 | 4084 | 6084 | 7084 | 8084 | T212B156M020(2)S |
| 20 | 18.0 | C | T110C186(1)020A(3) | 2.0 | 6 | | | | | | | | | |
| 20 | 22.0 | C | T110C226(1)020A(3) | 2.5 | 6 | | | | | | | | | |
| 20 | 27.0 | C | T110C276J020A(3) | 2.5 | 6 | 5035 | 5235 | 5435 | 5635 | 4085 | 6085 | 7085 | 8085 | T212C276J020(2)S |
| 20 | 27.0 | C | T110C276K020A(3) | 2.5 | 6 | 2291 | 2531 | 2771 | 3011 | 4086 | 6086 | 7086 | 8086 | T212C276K020(2)S |
| 20 | 27.0 | C | T110C276M020A(3) | 2.5 | 6 | | | | | | | | | |
| 20 | 33.0 | C | T110C336J020A(3) | 3.0 | 6 | 5036 | 5236 | 5436 | 5636 | 4087 | 6087 | 7087 | 8087 | T212C336J020(2)S |
| 20 | 33.0 | C | T110C336K020A(3) | 3.0 | 6 | 2292 | 2532 | 2772 | 3012 | 4088 | 6088 | 7088 | 8088 | T212C336K020(2)S |
| 20 | 33.0 | C | T110C336M020A(3) | 3.0 | 6 | 2293 | 2533 | 2773 | 3013 | 4089 | 6089 | 7089 | 8089 | T212C336M020(2)S |
| 20 | 39.0 | C | T110C396J020A(3) | 3.0 | 6 | 5037 | 5237 | 5437 | 5637 | 4090 | 6090 | 7090 | 8090 | T212C396J020(2)S |
| 20 | 39.0 | C | T110C396K020A(3) | 3.0 | 6 | 2294 | 2534 | 2774 | 3014 | 4091 | 6091 | 7091 | 8091 | T212C396K020(2)S |
| 20 | 39.0 | C | T110C396M020A(3) | 3.0 | 6 | | | | | | | | | |
| 20 | 47.0 | C | T110C476J020A(3) | 4.5 | 6 | 5038 | 5238 | 5438 | 5638 | 4092 | 6092 | 7092 | 8092 | T212C476J020(2)S |
| 20 | 47.0 | C | T110C476K020A(3) | 4.5 | 6 | 2295 | 2535 | 2775 | 3015 | 4093 | 6093 | 7093 | 8093 | T212C476K020(2)S |
| 20 | 47.0 | C | T110C476M020A(3) | 4.5 | 6 | 2296 | 2536 | 2776 | 3016 | 4094 | 6094 | 7094 | 8094 | T212C476M020(2)S |
| 20 | 56.0 | D | T110D566J020A(3) | 5.5 | 6 | 5039 | 5239 | 5439 | 5639 | 4095 | 6095 | 7095 | 8095 | T212D566J020(2)S |
| 20 | 56.0 | D | T110D566K020A(3) | 5.5 | 6 | 2297 | 2537 | 2777 | 3017 | 4096 | 6096 | 7096 | 8096 | T212D566K020(2)S |
| 20 | 56.0 | D | T110D566M020A(3) | 5.5 | 6 | | | | | | | | | |
| 20 | 68.0 | D | T110D686J020A(3) | 6.0 | 6 | 5040 | 5240 | 5440 | 5640 | 4097 | 6097 | 7097 | 8097 | T212D686J020(2)S |
| 20 | 68.0 | D | T110D686K020A(3) | 6.0 | 6 | 2298 | 2538 | 2778 | 3018 | 4098 | 6098 | 7098 | 8098 | T212D686K020(2)S |
| 20 | 68.0 | D | T110D686M020A(3) | 6.0 | 6 | 2299 | 2539 | 2779 | 3019 | 4099 | 6099 | 7099 | 8099 | T212D686M020(2)S |
| 20 | 82.0 | D | T110D826J020A(3) | 6.0 | 6 | 5041 | 5241 | 5441 | 5641 | 4100 | 6100 | 7100 | 8100 | T212D826J020(2)S |
| 20 | 82.0 | D | T110D826K020A(3) | 6.0 | 6 | 2300 | 2540 | 2780 | 3020 | 4101 | 6101 | 7101 | 8101 | T212D826K020(2)S |
| 20 | 82.0 | D | T110D826M020A(3) | 6.0 | 6 | | | | | | | | | |
| 20 | 100.0 | D | T110D107J020A(3) | 10.0 | 6 | 5042 | 5242 | 5442 | 5642 | 4102 | 6102 | 7102 | 8102 | T212D107J020(2)S |
| 20 | 100.0 | D | T110D107K020A(3) | 10.0 | 6 | 2301 | 2541 | 2781 | 3021 | 4103 | 6103 | 7103 | 8103 | T212D107K020(2)S |
| 20 | 100.0 | D | T110D107M020A(3) | 10.0 | 6 | 2302 | 2542 | 2782 | 3022 | 4104 | 6104 | 7104 | 8104 | T212D107M020(2)S |
| 35 | 0.0047 | A | T110A472(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.0056 | A | T110A562(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.0068 | A | T110A682(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.0082 | A | T110A822(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.01 | A | T110A103(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.012 | A | T110A123(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.015 | A | T110A153(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.018 | A | T110A183(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.022 | A | T110A223(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.027 | A | T110A273(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.033 | A | T110A333(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.039 | A | T110A393(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 35 | 0.047 | A | T110A473(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.056 | A | T110A563(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.068 | A | T110A683(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.082 | A | T110A823(1)035A(3) | 0.1 | 3 | | | | | | | | | |
| 35 | 0.1 | A | T110A104(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.12 | A | T110A124(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.15 | A | T110A154(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.18 | A | T110A184(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.22 | A | T110A224(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.27 | A | T110A274(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.33 | A | T110A334(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.39 | A | T110A394(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.47 | A | T110A474(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.56 | A | T110A564(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.68 | A | T110A684(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 0.82 | A | T110A824(1)035A(3) | 0.5 | 3 | | | | | | | | | |
| 35 | 1.0 | A | T110A105(1)035A(3) | 0.5 | 6 | | | | | | | | | |
| 35 | 1.2 | B | T110B125(1)035A(3) | 0.5 | 4 | | | | | | | | | |
| 35 | 1.5 | B | T110B155(1)035A(3) | 0.5 | 4 | | | | | | | | | |
| 35 | 1.8 | B | T110B185(1)035A(3) | 0.5 | 4 | | | | | | | | | |
| 35 | 2.2 | B | T110B225(1)035A(3) | 1.0 | 4 | | | | | | | | | |
| 35 | 2.7 | B | T110B275(1)035A(3) | 1.0 | 4 | | | | | | | | | |
| 35 | 3.3 | B | T110B335(1)035A(3) | 1.0 | 4 | | | | | | | | | |
| 35 | 3.9 | B | T110B395(1)035A(3) | 1.0 | 4 | | | | | | | | | |
| 35 | 4.7 | B | T110B475(1)035A(3) | 1.0 | 4 | | | | | | | | | |
| 35 | 5.6 | B | T110B565J035A(3) | 1.0 | 4 | 5043 | 5243 | 5443 | 5643 | 4105 | 6105 | 7105 | 8105 | T212B565J035(2)S |
| 35 | 5.6 | B | T110B565K035A(3) | 1.0 | 4 | 2303 | 2543 | 2783 | 3023 | 4106 | 6106 | 7106 | 8106 | T212B565K035(2)S |
| 35 | 5.6 | B | T110B565M035A(3) | 1.0 | 4 | | | | | | | | | |
| 35 | 6.8 | B | T110B685J035A(3) | 1.5 | 4 | 5044 | 5244 | 5444 | 5644 | 4107 | 6107 | 7107 | 8107 | T212B685J035(2)S |
| 35 | 6.8 | B | T110B685K035A(3) | 1.5 | 4 | 2304 | 2544 | 2784 | 3024 | 4108 | 6108 | 7108 | 8108 | T212B685K035(2)S |
| 35 | 6.8 | B | T110B685M035A(3) | 1.5 | 6 | 2305 | 2545 | 2785 | 3025 | 4109 | 6109 | 7109 | 8109 | T212B685M035(2)S |
| 35 | 8.2 | C | T110C825(1)035A(3) | 3.0 | 4 | | | | | | | | | |
| 35 | 10.0 | C | T110C106(1)035A(3) | 3.0 | 4 | | | | | | | | | |
| 35 | 12.0 | C | T110C126(1)035A(3) | 3.0 | 4 | | | | | | | | | |
| 35 | 15.0 | C | T110C156(1)035A(3) | 3.0 | 4 | | | | | | | | | |
| 35 | 18.0 | C | T110C186(1)035A(3) | 3.0 | 4 | | | | | | | | | |
| 35 | 22.0 | C | T110C226J035A(3) | 4.0 | 4 | 5045 | 5245 | 5445 | 5645 | 4110 | 6110 | 7110 | 8110 | T212C226J035(2)S |
| 35 | 22.0 | C | T110C226K035A(3) | 4.0 | 4 | 2306 | 2546 | 2786 | 3026 | 4111 | 6111 | 7111 | 8111 | T212C226K035(2)S |
| 35 | 22.0 | C | T110C226M035A(3) | 4.0 | 4 | 2307 | 2547 | 2787 | 3027 | 4112 | 6112 | 7112 | 8112 | T212C226M035(2)S |
| 35 | 27.0 | D | T110D276J035A(3) | 4.5 | 4 | 5046 | 5246 | 5446 | 5646 | 4113 | 6113 | 7113 | 8113 | T212D276J035(2)S |
| 35 | 27.0 | D | T110D276K035A(3) | 4.5 | 4 | 2308 | 2548 | 2788 | 3028 | 4114 | 6114 | 7114 | 8114 | T212D276K035(2)S |
| 35 | 27.0 | D | T110D276M035A(3) | 4.5 | 4 | | | | | | | | | |
| 35 | 33.0 | D | T110D336J035A(3) | 5.5 | 4 | 5047 | 5247 | 5447 | 5647 | 4115 | 6115 | 7115 | 8115 | T212D336J035(2)S |
| 35 | 33.0 | D | T110D336K035A(3) | 5.5 | 4 | 2309 | 2549 | 2789 | 3029 | 4116 | 6116 | 7116 | 8116 | T212D336K035(2)S |
| 35 | 33.0 | D | T110D336M035A(3) | 5.5 | 4 | 2310 | 2550 | 2790 | 3030 | 4117 | 6117 | 7117 | 8117 | T212D336M035(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish. Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | KEMET Equivalent Military |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 35 | 39.0 | D | T110D396J035A(3) | 6.0 | 4 | 5048 | 5248 | 5448 | 5648 | 4118 | 6118 | 7118 | 8118 | T212D396J035(2)S |
| 35 | 39.0 | D | T110D396K035A(3) | 6.0 | 4 | 2311 | 2551 | 2791 | 3031 | 4119 | 6119 | 7119 | 8119 | T212D396K035(2)S |
| 35 | 39.0 | D | T110D396M035A(3) | 6.0 | 4 | | | | | | | | | |
| 35 | 47.0 | D | T110D476J035A(3) | 8.0 | 4 | 5049 | 5249 | 5449 | 5649 | 4120 | 6120 | 7120 | 8120 | T212D476J035(2)S |
| 35 | 47.0 | D | T110D476K035A(3) | 8.0 | 4 | 2312 | 2552 | 2792 | 3032 | 4121 | 6121 | 7121 | 8121 | T212D476K035(2)S |
| 35 | 47.0 | D | T110D476M035A(3) | 8.0 | 4 | 2313 | 2553 | 2793 | 3033 | 4122 | 6122 | 7122 | 8122 | T212D476M035(2)S |
| 50 | 0.0047 | A | T110A472J050A(3) | 0.1 | 2 | 5050 | 5250 | 5450 | 5650 | 4123 | 6123 | 7123 | 8123 | T212A472J050(2)S |
| 50 | 0.0047 | A | T110A472K050A(3) | 0.1 | 2 | 2314 | 2554 | 2794 | 3034 | 4124 | 6124 | 7124 | 8124 | T212A472K050(2)S |
| 50 | 0.0047 | A | T110A472M050A(3) | 0.1 | 2 | 2315 | 2555 | 2795 | 3035 | 4125 | 6125 | 7125 | 8125 | T212A472M050(2)S |
| 50 | 0.0056 | A | T110A562J050A(3) | 0.1 | 2 | 5051 | 5251 | 5451 | 5651 | 4126 | 6126 | 7126 | 8126 | T212A562J050(2)S |
| 50 | 0.0056 | A | T110A562K050A(3) | 0.1 | 2 | 2316 | 2556 | 2796 | 3036 | 4127 | 6127 | 7127 | 8127 | T212A562K050(2)S |
| 50 | 0.0056 | A | T110A562M050A(3) | 0.1 | 2 | | | | | | | | | |
| 50 | 0.0068 | A | T110A682J050A(3) | 0.1 | 2 | 5052 | 5252 | 5452 | 5652 | 4128 | 6128 | 7128 | 8128 | T212A682J050(2)S |
| 50 | 0.0068 | A | T110A682K050A(3) | 0.1 | 2 | 2317 | 2557 | 2797 | 3037 | 4129 | 6129 | 7129 | 8129 | T212A682K050(2)S |
| 50 | 0.0068 | A | T110A682M050A(3) | 0.1 | 2 | 2318 | 2558 | 2798 | 3038 | 4130 | 6130 | 7130 | 8130 | T212A682M050(2)S |
| 50 | 0.0082 | A | T110A822J050A(3) | 0.1 | 2 | 5053 | 5253 | 5453 | 5653 | 4131 | 6131 | 7131 | 8131 | T212A822J050(2)S |
| 50 | 0.0082 | A | T110A822K050A(3) | 0.1 | 2 | 2319 | 2559 | 2799 | 3039 | 4132 | 6132 | 7132 | 8132 | T212A822K050(2)S |
| 50 | 0.0082 | A | T110A822M050A(3) | 0.1 | 2 | | | | | | | | | |
| 50 | 0.01 | A | T110A103J050A(3) | 0.1 | 2 | 5054 | 5254 | 5454 | 5654 | 4133 | 6133 | 7133 | 8133 | T212A103J050(2)S |
| 50 | 0.01 | A | T110A103K050A(3) | 0.1 | 2 | 2320 | 2560 | 2800 | 3040 | 4134 | 6134 | 7134 | 8134 | T212A103K050(2)S |
| 50 | 0.01 | A | T110A103M050A(3) | 0.1 | 2 | 2321 | 2561 | 2801 | 3041 | 4135 | 6135 | 7135 | 8135 | T212A103M050(2)S |
| 50 | 0.012 | A | T110A123J050A(3) | 0.1 | 2 | 5055 | 5255 | 5455 | 5655 | 4136 | 6136 | 7136 | 8136 | T212A123J050(2)S |
| 50 | 0.012 | A | T110A123K050A(3) | 0.1 | 2 | 2322 | 2562 | 2802 | 3042 | 4137 | 6137 | 7137 | 8137 | T212A123K050(2)S |
| 50 | 0.012 | A | T110A123M050A(3) | 0.1 | 2 | | | | | | | | | |
| 50 | 0.015 | A | T110A153J050A(3) | 0.1 | 2 | 5056 | 5256 | 5456 | 5656 | 4138 | 6138 | 7138 | 8138 | T212A153J050(2)S |
| 50 | 0.015 | A | T110A153K050A(3) | 0.1 | 2 | 2323 | 2563 | 2803 | 3043 | 4139 | 6139 | 7139 | 8139 | T212A153K050(2)S |
| 50 | 0.015 | A | T110A153M050A(3) | 0.1 | 2 | 2324 | 2564 | 2804 | 3044 | 4140 | 6140 | 7140 | 8140 | T212A153M050(2)S |
| 50 | 0.018 | A | T110A183J050A(3) | 0.1 | 2 | 5057 | 5257 | 5457 | 5657 | 4141 | 6141 | 7141 | 8141 | T212A183J050(2)S |
| 50 | 0.018 | A | T110A183K050A(3) | 0.1 | 2 | 2325 | 2565 | 2805 | 3045 | 4142 | 6142 | 7142 | 8142 | T212A183K050(2)S |
| 50 | 0.018 | A | T110A183M050A(3) | 0.1 | 2 | | | | | | | | | |
| 50 | 0.022 | A | T110A223J050A(3) | 0.1 | 2 | 5058 | 5258 | 5458 | 5658 | 4143 | 6143 | 7143 | 8143 | T212A223J050(2)S |
| 50 | 0.022 | A | T110A223K050A(3) | 0.1 | 2 | 2326 | 2566 | 2806 | 3046 | 4144 | 6144 | 7144 | 8144 | T212A223K050(2)S |
| 50 | 0.022 | A | T110A223M050A(3) | 0.1 | 2 | 2327 | 2567 | 2807 | 3047 | 4145 | 6145 | 7145 | 8145 | T212A223M050(2)S |
| 50 | 0.027 | A | T110A273J050A(3) | 0.1 | 2 | 5059 | 5259 | 5459 | 5659 | 4146 | 6146 | 7146 | 8146 | T212A273J050(2)S |
| 50 | 0.027 | A | T110A273K050A(3) | 0.1 | 2 | 2328 | 2568 | 2808 | 3048 | 4147 | 6147 | 7147 | 8147 | T212A273K050(2)S |
| 50 | 0.027 | A | T110A273M050A(3) | 0.1 | 2 | | | | | | | | | |
| 50 | 0.033 | A | T110A333J050A(3) | 0.1 | 2 | 5060 | 5260 | 5460 | 5660 | 4148 | 6148 | 7148 | 8148 | T212A333J050(2)S |
| 50 | 0.033 | A | T110A333K050A(3) | 0.1 | 2 | 2329 | 2569 | 2809 | 3049 | 4149 | 6149 | 7149 | 8149 | T212A333K050(2)S |
| 50 | 0.033 | A | T110A333M050A(3) | 0.1 | 2 | 2330 | 2570 | 2810 | 3050 | 4150 | 6150 | 7150 | 8150 | T212A333M050(2)S |
| 50 | 0.039 | A | T110A393J050A(3) | 0.1 | 2 | 5061 | 5261 | 5461 | 5661 | 4151 | 6151 | 7151 | 8151 | T212A393J050(2)S |
| 50 | 0.039 | A | T110A393K050A(3) | 0.1 | 2 | 2331 | 2571 | 2811 | 3051 | 4152 | 6152 | 7152 | 8152 | T212A393K050(2)S |
| 50 | 0.039 | A | T110A393M050A(3) | 0.1 | 2 | | | | | | | | | |
| 50 | 0.047 | A | T110A473J050A(3) | 0.1 | 2 | 5062 | 5262 | 5462 | 5662 | 4153 | 6153 | 7153 | 8153 | T212A473J050(2)S |
| 50 | 0.047 | A | T110A473K050A(3) | 0.1 | 2 | 2332 | 2572 | 2812 | 3052 | 4154 | 6154 | 7154 | 8154 | T212A473K050(2)S |
| 50 | 0.047 | A | T110A473M050A(3) | 0.1 | 2 | 2333 | 2573 | 2813 | 3053 | 4155 | 6155 | 7155 | 8155 | T212A473M050(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish. Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | KEMET Equivalent Military |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 50 | 0.056 | A | T110A563J050A(3) | 0.1 | 2 | 5063 | 5263 | 5463 | 5663 | 4156 | 6156 | 7156 | 8156 | T212A563J050(2)S |
| 50 | 0.056 | A | T110A563K050A(3) | 0.1 | 2 | 2334 | 2574 | 2814 | 3054 | 4157 | 6157 | 7157 | 8157 | T212A563K050(2)S |
| 50 | 0.056 | A | T110A563M050A(3) | 0.1 | 2 | | | | | | | | | |
| 50 | 0.068 | A | T110A683J050A(3) | 0.1 | 2 | 5064 | 5264 | 5464 | 5664 | 4158 | 6158 | 7158 | 8158 | T212A683J050(2)S |
| 50 | 0.068 | A | T110A683K050A(3) | 0.1 | 2 | 2335 | 2575 | 2815 | 3055 | 4159 | 6159 | 7159 | 8159 | T212A683K050(2)S |
| 50 | 0.068 | A | T110A683M050A(3) | 0.1 | 2 | 2336 | 2576 | 2816 | 3056 | 4160 | 6160 | 7160 | 8160 | T212A683M050(2)S |
| 50 | 0.082 | A | T110A823J050A(3) | 0.1 | 2 | 5065 | 5265 | 5465 | 5665 | 4161 | 6161 | 7161 | 8161 | T212A823J050(2)S |
| 50 | 0.082 | A | T110A823K050A(3) | 0.1 | 2 | 2337 | 2577 | 2817 | 3057 | 4162 | 6162 | 7162 | 8162 | T212A823K050(2)S |
| 50 | 0.082 | A | T110A823M050A(3) | 0.1 | 2 | | | | | | | | | |
| 50 | 0.1 | A | T110A104J050A(3) | 0.3 | 2 | 5066 | 5266 | 5466 | 5666 | 4163 | 6163 | 7163 | 8163 | T212A104J050(2)S |
| 50 | 0.1 | A | T110A104K050A(3) | 0.3 | 2 | 2338 | 2578 | 2818 | 3058 | 4164 | 6164 | 7164 | 8164 | T212A104K050(2)S |
| 50 | 0.1 | A | T110A104M050A(3) | 0.3 | 2 | 2339 | 2579 | 2819 | 3059 | 4165 | 6165 | 7165 | 8165 | T212A104M050(2)S |
| 50 | 0.12 | A | T110A124J050A(3) | 0.3 | 2 | 5067 | 5267 | 5467 | 5667 | 4166 | 6166 | 7166 | 8166 | T212A124J050(2)S |
| 50 | 0.12 | A | T110A124K050A(3) | 0.3 | 2 | 2340 | 2580 | 2820 | 3060 | 4167 | 6167 | 7167 | 8167 | T212A124K050(2)S |
| 50 | 0.12 | A | T110A124M050A(3) | 0.3 | 2 | | | | | | | | | |
| 50 | 0.15 | A | T110A154J050A(3) | 0.3 | 2 | 5068 | 5268 | 5468 | 5668 | 4168 | 6168 | 7168 | 8168 | T212A154J050(2)S |
| 50 | 0.15 | A | T110A154K050A(3) | 0.3 | 2 | 2341 | 2581 | 2821 | 3061 | 4169 | 6169 | 7169 | 8169 | T212A154K050(2)S |
| 50 | 0.15 | A | T110A154M050A(3) | 0.3 | 2 | 2342 | 2582 | 2822 | 3062 | 4170 | 6170 | 7170 | 8170 | T212A154M050(2)S |
| 50 | 0.18 | A | T110A184J050A(3) | 0.3 | 2 | 5069 | 5269 | 5469 | 5669 | 4171 | 6171 | 7171 | 8171 | T212A184J050(2)S |
| 50 | 0.18 | A | T110A184K050A(3) | 0.3 | 2 | 2343 | 2583 | 2823 | 3063 | 4172 | 6172 | 7172 | 8172 | T212A184K050(2)S |
| 50 | 0.18 | A | T110A184M050A(3) | 0.3 | 2 | | | | | | | | | |
| 50 | 0.22 | A | T110A224J050A(3) | 0.3 | 2 | 5070 | 5270 | 5470 | 5670 | 4173 | 6173 | 7173 | 8173 | T212A224J050(2)S |
| 50 | 0.22 | A | T110A224K050A(3) | 0.3 | 2 | 2344 | 2584 | 2824 | 3064 | 4174 | 6174 | 7174 | 8174 | T212A224K050(2)S |
| 50 | 0.22 | A | T110A224M050A(3) | 0.3 | 2 | 2345 | 2585 | 2825 | 3065 | 4175 | 6175 | 7175 | 8175 | T212A224M050(2)S |
| 50 | 0.27 | A | T110A274J050A(3) | 0.3 | 2 | 5071 | 5271 | 5471 | 5671 | 4176 | 6176 | 7176 | 8176 | T212A274J050(2)S |
| 50 | 0.27 | A | T110A274K050A(3) | 0.3 | 2 | 2346 | 2586 | 2826 | 3066 | 4177 | 6177 | 7177 | 8177 | T212A274K050(2)S |
| 50 | 0.27 | A | T110A274M050A(3) | 0.3 | 2 | | | | | | | | | |
| 50 | 0.33 | A | T110A334J050A(3) | 0.3 | 2 | 5072 | 5272 | 5472 | 5672 | 4178 | 6178 | 7178 | 8178 | T212A334J050(2)S |
| 50 | 0.33 | A | T110A334K050A(3) | 0.3 | 2 | 2347 | 2587 | 2827 | 3067 | 4179 | 6179 | 7179 | 8179 | T212A334K050(2)S |
| 50 | 0.33 | A | T110A334M050A(3) | 0.3 | 2 | 2348 | 2588 | 2828 | 3068 | 4180 | 6180 | 7180 | 8180 | T212A334M050(2)S |
| 50 | 0.39 | A | T110A394J050A(3) | 0.3 | 2 | 5073 | 5273 | 5473 | 5673 | 4181 | 6181 | 7181 | 8181 | T212A394J050(2)S |
| 50 | 0.39 | A | T110A394K050A(3) | 0.3 | 2 | 2349 | 2589 | 2829 | 3069 | 4182 | 6182 | 7182 | 8182 | T212A394K050(2)S |
| 50 | 0.39 | A | T110A394M050A(3) | 0.3 | 2 | | | | | | | | | |
| 50 | 0.47 | A | T110A474J050A(3) | 0.3 | 2 | 5074 | 5274 | 5474 | 5674 | 4183 | 6183 | 7183 | 8183 | T212A474J050(2)S |
| 50 | 0.47 | A | T110A474K050A(3) | 0.3 | 2 | 2350 | 2590 | 2830 | 3070 | 4184 | 6184 | 7184 | 8184 | T212A474K050(2)S |
| 50 | 0.47 | A | T110A474M050A(3) | 0.3 | 2 | 2351 | 2591 | 2831 | 3071 | 4185 | 6185 | 7185 | 8185 | T212A474M050(2)S |
| 50 | 0.56 | A | T110A564J050A(3) | 0.3 | 2 | 5075 | 5275 | 5475 | 5675 | 4186 | 6186 | 7186 | 8186 | T212A564J050(2)S |
| 50 | 0.56 | A | T110A564K050A(3) | 0.3 | 2 | 2352 | 2592 | 2832 | 3072 | 4187 | 6187 | 7187 | 8187 | T212A564K050(2)S |
| 50 | 0.56 | A | T110A564M050A(3) | 0.3 | 2 | | | | | | | | | |
| 50 | 0.68 | A | T110A684J050A(3) | 0.3 | 2 | 5076 | 5276 | 5476 | 5676 | 4188 | 6188 | 7188 | 8188 | T212A684J050(2)S |
| 50 | 0.68 | A | T110A684K050A(3) | 0.3 | 2 | 2353 | 2593 | 2833 | 3073 | 4189 | 6189 | 7189 | 8189 | T212A684K050(2)S |
| 50 | 0.68 | A | T110A684M050A(3) | 0.3 | 2 | 2354 | 2594 | 2834 | 3074 | 4190 | 6190 | 7190 | 8190 | T212A684M050(2)S |
| 50 | 0.82 | A | T110A824J050A(3) | 0.3 | 2 | 5077 | 5277 | 5477 | 5677 | 4191 | 6191 | 7191 | 8191 | T212A824J050(2)S |
| 50 | 0.82 | A | T110A824K050A(3) | 0.3 | 2 | 2355 | 2595 | 2835 | 3075 | 4192 | 6192 | 7192 | 8192 | T212A824K050(2)S |
| 50 | 0.82 | A | T110A824M050A(3) | 0.3 | 2 | | | | | | | | | |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 50 | 1.0 | A | T110A105J050A(3) | 0.4 | 2 | 5078 | 5278 | 5478 | 5678 | 4193 | 6193 | 7193 | 8193 | T212A105J050(2)S |
| 50 | 1.0 | A | T110A105K050A(3) | 0.4 | 2 | 2356 | 2596 | 2836 | 3076 | 4194 | 6194 | 7194 | 8194 | T212A105K050(2)S |
| 50 | 1.0 | A | T110A105M050A(3) | 0.4 | 2 | 2357 | 2597 | 2837 | 3077 | 4195 | 6195 | 7195 | 8195 | T212A105M050(2)S |
| 50 | 1.2 | B | T110B125J050A(3) | 0.4 | 4 | 5079 | 5279 | 5479 | 5679 | 4196 | 6196 | 7196 | 8196 | T212B125J050(2)S |
| 50 | 1.2 | B | T110B125K050A(3) | 0.4 | 4 | 2358 | 2598 | 2838 | 3078 | 4197 | 6197 | 7197 | 8197 | T212B125K050(2)S |
| 50 | 1.2 | B | T110B125M050A(3) | 0.4 | 4 | | | | | | | | | |
| 50 | 1.5 | B | T110B155J050A(3) | 0.5 | 4 | 5080 | 5280 | 5480 | 5680 | 4198 | 6198 | 7198 | 8198 | T212B155J050(2)S |
| 50 | 1.5 | B | T110B155K050A(3) | 0.5 | 4 | 2359 | 2599 | 2839 | 3079 | 4199 | 6199 | 7199 | 8199 | T212B155K050(2)S |
| 50 | 1.5 | B | T110B155M050A(3) | 0.5 | 4 | 2360 | 2600 | 2840 | 3080 | 4200 | 6200 | 7200 | 8200 | T212B155M050(2)S |
| 50 | 1.8 | B | T110B185J050A(3) | 0.5 | 4 | 5081 | 5281 | 5481 | 5681 | 4201 | 6201 | 7201 | 8201 | T212B185J050(2)S |
| 50 | 1.8 | B | T110B185K050A(3) | 0.5 | 4 | 2361 | 2601 | 2841 | 3081 | 4202 | 6202 | 7202 | 8202 | T212B185K050(2)S |
| 50 | 1.8 | B | T110B185M050A(3) | 0.5 | 4 | | | | | | | | | |
| 50 | 2.2 | B | T110B225J050A(3) | 0.8 | 4 | 5082 | 5282 | 5482 | 5682 | 4203 | 6203 | 7203 | 8203 | T212B225J050(2)S |
| 50 | 2.2 | B | T110B225K050A(3) | 0.8 | 4 | 2362 | 2602 | 2842 | 3082 | 4204 | 6204 | 7204 | 8204 | T212B225K050(2)S |
| 50 | 2.2 | B | T110B225M050A(3) | 0.8 | 4 | 2363 | 2603 | 2843 | 3083 | 4205 | 6205 | 7205 | 8205 | T212B225M050(2)S |
| 50 | 2.7 | B | T110B275J050A(3) | 0.8 | 4 | 5083 | 5283 | 5483 | 5683 | 4206 | 6206 | 7206 | 8206 | T212B275J050(2)S |
| 50 | 2.7 | B | T110B275K050A(3) | 0.8 | 4 | 2364 | 2604 | 2844 | 3084 | 4207 | 6207 | 7207 | 8207 | T212B275K050(2)S |
| 50 | 2.7 | B | T110B275M050A(3) | 0.8 | 4 | | | | | | | | | |
| 50 | 3.3 | B | T110B335J050A(3) | 1.2 | 4 | 5084 | 5284 | 5484 | 5684 | 4208 | 6208 | 7208 | 8208 | T212B335J050(2)S |
| 50 | 3.3 | B | T110B335K050A(3) | 1.2 | 4 | 2365 | 2605 | 2845 | 3085 | 4209 | 6209 | 7209 | 8209 | T212B335K050(2)S |
| 50 | 3.3 | B | T110B335M050A(3) | 1.2 | 4 | 2366 | 2606 | 2846 | 3086 | 4210 | 6210 | 7210 | 8210 | T212B335M050(2)S |
| 50 | 3.9 | B | T110B395J050A(3) | 1.5 | 4 | 5085 | 5285 | 5485 | 5685 | 4211 | 6211 | 7211 | 8211 | T212B395J050(2)S |
| 50 | 3.9 | B | T110B395K050A(3) | 1.5 | 4 | 2367 | 2607 | 2847 | 3087 | 4212 | 6212 | 7212 | 8212 | T212B395K050(2)S |
| 50 | 3.9 | B | T110B395M050A(3) | 1.5 | 4 | | | | | | | | | |
| 50 | 4.7 | B | T110B475J050A(3) | 1.7 | 4 | 5086 | 5286 | 5486 | 5686 | 4213 | 6213 | 7213 | 8213 | T212B475J050(2)S |
| 50 | 4.7 | B | T110B475K050A(3) | 1.7 | 4 | 2368 | 2608 | 2848 | 3088 | 4214 | 6214 | 7214 | 8214 | T212B475K050(2)S |
| 50 | 4.7 | B | T110B475M050A(3) | 1.7 | 4 | 2369 | 2609 | 2849 | 3089 | 4215 | 6215 | 7215 | 8215 | T212B475M050(2)S |
| 50 | 5.6 | C | T110C565J050A(3) | 2.2 | 4 | 5087 | 5287 | 5487 | 5687 | 4216 | 6216 | 7216 | 8216 | T212C565J050(2)S |
| 50 | 5.6 | C | T110C565K050A(3) | 2.2 | 4 | 2370 | 2610 | 2850 | 3090 | 4217 | 6217 | 7217 | 8217 | T212C565K050(2)S |
| 50 | 5.6 | C | T110C565M050A(3) | 2.2 | 4 | | | | | | | | | |
| 50 | 6.8 | C | T110C685J050A(3) | 2.2 | 4 | 5088 | 5288 | 5488 | 5688 | 4218 | 6218 | 7218 | 8218 | T212C685J050(2)S |
| 50 | 6.8 | C | T110C685K050A(3) | 2.2 | 4 | 2371 | 2611 | 2851 | 3091 | 4219 | 6219 | 7219 | 8219 | T212C685K050(2)S |
| 50 | 6.8 | C | T110C685M050A(3) | 2.2 | 4 | 2372 | 2612 | 2852 | 3092 | 4220 | 6220 | 7220 | 8220 | T212C685M050(2)S |
| 50 | 8.2 | C | T110C825J050A(3) | 2.5 | 4 | 5089 | 5289 | 5489 | 5689 | 4221 | 6221 | 7221 | 8221 | T212C825J050(2)S |
| 50 | 8.2 | C | T110C825K050A(3) | 2.5 | 4 | 2373 | 2613 | 2853 | 3093 | 4222 | 6222 | 7222 | 8222 | T212C825K050(2)S |
| 50 | 8.2 | C | T110C825M050A(3) | 2.5 | 4 | | | | | | | | | |
| 50 | 10.0 | C | T110C106J050A(3) | 2.5 | 4 | 5090 | 5290 | 5490 | 5690 | 4223 | 6223 | 7223 | 8223 | T212C106J050(2)S |
| 50 | 10.0 | C | T110C106K050A(3) | 2.5 | 4 | 2374 | 2614 | 2854 | 3094 | 4224 | 6224 | 7224 | 8224 | T212C106K050(2)S |
| 50 | 10.0 | C | T110C106M050A(3) | 2.5 | 4 | 2375 | 2615 | 2855 | 3095 | 4225 | 6225 | 7225 | 8225 | T212C106M050(2)S |
| 50 | 12.0 | C | T110C126J050A(3) | 3.0 | 4 | 5091 | 5291 | 5491 | 5691 | 4226 | 6226 | 7226 | 8226 | T212C126J050(2)S |
| 50 | 12.0 | C | T110C126K050A(3) | 3.0 | 4 | 2376 | 2616 | 2856 | 3096 | 4227 | 6227 | 7227 | 8227 | T212C126K050(2)S |
| 50 | 12.0 | C | T110C126M050A(3) | 3.0 | 4 | | | | | | | | | |
| 50 | 15.0 | C | T110C156J050A(3) | 4.0 | 4 | 5092 | 5292 | 5492 | 5692 | 4228 | 6228 | 7228 | 8228 | T212C156J050(2)S |
| 50 | 15.0 | C | T110C156K050A(3) | 4.0 | 4 | 2377 | 2617 | 2857 | 3097 | 4229 | 6229 | 7229 | 8229 | T212C156K050(2)S |
| 50 | 15.0 | C | T110C156M050A(3) | 4.0 | 4 | 2378 | 2618 | 2858 | 3098 | 4230 | 6230 | 7230 | 8230 | T212C156M050(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 50 | 18.0 | C | T110C186J050A(3) | 4.5 | 4 | 5093 | 5293 | 5493 | 5693 | 4231 | 6231 | 7231 | 8231 | T212C186J050(2)S |
| 50 | 18.0 | C | T110C186K050A(3) | 4.5 | 4 | 2379 | 2619 | 2859 | 3099 | 4232 | 6232 | 7232 | 8232 | T212C186K050(2)S |
| 50 | 18.0 | C | T110C186M050A(3) | 4.5 | 4 | | | | | | | | | |
| 50 | 22.0 | D | T110D226J050A(3) | 5.5 | 4 | 5094 | 5294 | 5494 | 5694 | 4233 | 6233 | 7233 | 8233 | T212D226J050(2)S |
| 50 | 22.0 | D | T110D226K050A(3) | 5.5 | 4 | 2380 | 2620 | 2860 | 3100 | 4234 | 6234 | 7234 | 8234 | T212D226K050(2)S |
| 50 | 22.0 | D | T110D226M050A(3) | 5.5 | 4 | 2381 | 2621 | 2861 | 3101 | 4235 | 6235 | 7235 | 8235 | T212D226M050(2)S |
| 60 | 0.0047 | A | T110A472(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.0056 | A | T110A562(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.0068 | A | T110A682(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.0082 | A | T110A822(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.01 | A | T110A103(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.012 | A | T110A123(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.015 | A | T110A153(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.018 | A | T110A183(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.022 | A | T110A223(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.027 | A | T110A273(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.033 | A | T110A333(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.039 | A | T110A393(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.047 | A | T110A473(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.056 | A | T110A563(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.068 | A | T110A683(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.082 | A | T110A823(1)060A(3) | 0.3 | 3 | | | | | | | | | |
| 60 | 0.1 | A | T110A104(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.12 | A | T110A124(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.15 | A | T110A154(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.18 | A | T110A184(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.22 | A | T110A224(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.27 | A | T110A274(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.33 | A | T110A334(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.39 | A | T110A394(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.47 | A | T110A474(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.56 | A | T110A564(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.68 | A | T110A684(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 0.82 | B | T110B824(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 1.0 | B | T110B105(1)060A(3) | 0.5 | 3 | | | | | | | | | |
| 60 | 1.2 | B | T110B125(1)060A(3) | 0.5 | 4 | | | | | | | | | |
| 60 | 1.5 | B | T110B155(1)060A(3) | 0.5 | 4 | | | | | | | | | |
| 60 | 1.8 | B | T110B185(1)060A(3) | 0.5 | 4 | | | | | | | | | |
| 60 | 2.2 | B | T110B225(1)060A(3) | 1.0 | 4 | | | | | | | | | |
| 60 | 2.7 | B | T110B275(1)060A(3) | 1.0 | 4 | | | | | | | | | |
| 60 | 3.3 | B | T110B335(1)060A(3) | 1.5 | 4 | | | | | | | | | |
| 60 | 3.9 | B | T110B395(1)060A(3) | 1.5 | 4 | | | | | | | | | |
| 60 | 4.7 | C | T110C475(1)060A(3) | 2.0 | 4 | | | | | | | | | |
| 60 | 5.6 | C | T110C565(1)060A(3) | 2.0 | 4 | | | | | | | | | |
| 60 | 6.8 | C | T110C685(1)060A(3) | 3.0 | 4 | | | | | | | | | |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish. Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 60 | 8.2 | C | T110C825(1)060A(3) | 4.0 | 4 | | | | | | | | | |
| 60 | 10.0 | C | T110C106(1)060A(3) | 5.0 | 4 | | | | | | | | | |
| 60 | 12.0 | C | T110C126(1)060A(3) | 5.0 | 4 | | | | | | | | | |
| 60 | 15.0 | D | T110D156(1)060A(3) | 4.0 | 4 | | | | | | | | | |
| 60 | 18.0 | D | T110D186(1)060A(3) | 5.0 | 4 | | | | | | | | | |
| 60 | 22.0 | D | T110D226(1)060A(3) | 6.0 | 4 | | | | | | | | | |
| 75 | 0.0047 | A | T110A472(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.0056 | A | T110A562(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.0068 | A | T110A682(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.0082 | A | T110A822(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.01 | A | T110A103(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.012 | A | T110A123(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.015 | A | T110A153(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.018 | A | T110A183(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.022 | A | T110A223(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.027 | A | T110A273(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.033 | A | T110A333(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.039 | A | T110A393(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.047 | A | T110A473(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.056 | A | T110A563(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.068 | A | T110A683(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.082 | A | T110A823(1)075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.1 | A | T110A104J075A(3) | 0.3 | 2 | 5095 | 5295 | 5495 | 5695 | 4236 | 6236 | 7236 | 8236 | T212A104J075(2)S |
| 75 | 0.1 | A | T110A104K075A(3) | 0.3 | 2 | 2382 | 2622 | 2862 | 3102 | 4237 | 6237 | 7237 | 8237 | T212A104K075(2)S |
| 75 | 0.1 | A | T110A104M075A(3) | 0.3 | 2 | 2383 | 2623 | 2863 | 3103 | 4238 | 6238 | 7238 | 8238 | T212A104M075(2)S |
| 75 | 0.12 | A | T110A124J075A(3) | 0.3 | 2 | 5096 | 5296 | 5496 | 5696 | 4239 | 6239 | 7239 | 8239 | T212A124J075(2)S |
| 75 | 0.12 | A | T110A124K075A(3) | 0.3 | 2 | 2384 | 2624 | 2864 | 3104 | 4240 | 6240 | 7240 | 8240 | T212A124K075(2)S |
| 75 | 0.12 | A | T110A124M075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.15 | A | T110A154J075A(3) | 0.3 | 2 | 5097 | 5297 | 5497 | 5697 | 4241 | 6241 | 7241 | 8241 | T212A154J075(2)S |
| 75 | 0.15 | A | T110A154K075A(3) | 0.3 | 2 | 2385 | 2625 | 2865 | 3105 | 4242 | 6242 | 7242 | 8242 | T212A154K075(2)S |
| 75 | 0.15 | A | T110A154M075A(3) | 0.3 | 2 | 2386 | 2626 | 2866 | 3106 | 4243 | 6243 | 7243 | 8243 | T212A154M075(2)S |
| 75 | 0.18 | A | T110A184J075A(3) | 0.3 | 2 | 5098 | 5298 | 5498 | 5698 | 4244 | 6244 | 7244 | 8244 | T212A184J075(2)S |
| 75 | 0.18 | A | T110A184K075A(3) | 0.3 | 2 | 2387 | 2627 | 2867 | 3107 | 4245 | 6245 | 7245 | 8245 | T212A184K075(2)S |
| 75 | 0.18 | A | T110A184M075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.22 | A | T110A224J075A(3) | 0.3 | 2 | 5099 | 5299 | 5499 | 5699 | 4246 | 6246 | 7246 | 8246 | T212A224J075(2)S |
| 75 | 0.22 | A | T110A224K075A(3) | 0.3 | 2 | 2388 | 2628 | 2868 | 3108 | 4247 | 6247 | 7247 | 8247 | T212A224K075(2)S |
| 75 | 0.22 | A | T110A224M075A(3) | 0.3 | 2 | 2389 | 2629 | 2869 | 3109 | 4248 | 6248 | 7248 | 8248 | T212A224M075(2)S |
| 75 | 0.27 | A | T110A274J075A(3) | 0.3 | 2 | 5100 | 5300 | 5500 | 5700 | 4249 | 6249 | 7249 | 8249 | T212A274J075(2)S |
| 75 | 0.27 | A | T110A274K075A(3) | 0.3 | 2 | 2390 | 2630 | 2870 | 3110 | 4250 | 6250 | 7250 | 8250 | T212A274K075(2)S |
| 75 | 0.27 | A | T110A274M075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.33 | A | T110A334J075A(3) | 0.3 | 2 | 5101 | 5301 | 5501 | 5701 | 4251 | 6251 | 7251 | 8251 | T212A334J075(2)S |
| 75 | 0.33 | A | T110A334K075A(3) | 0.3 | 2 | 2391 | 2631 | 2871 | 3111 | 4252 | 6252 | 7252 | 8252 | T212A334K075(2)S |
| 75 | 0.33 | A | T110A334M075A(3) | 0.3 | 2 | 2392 | 2632 | 2872 | 3112 | 4253 | 6253 | 7253 | 8253 | T212A334M075(2)S |
| 75 | 0.39 | A | T110A394J075A(3) | 0.3 | 2 | 5102 | 5302 | 5502 | 5702 | 4254 | 6254 | 7254 | 8254 | T212A394J075(2)S |
| 75 | 0.39 | A | T110A394K075A(3) | 0.3 | 2 | 2393 | 2633 | 2873 | 3113 | 4255 | 6255 | 7255 | 8255 | T212A394K075(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish. Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 75 | 0.39 | A | T110A394M075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.47 | A | T110A474J075A(3) | 0.3 | 2 | 5103 | 5303 | 5503 | 5703 | 4256 | 6256 | 7256 | 8256 | T212A474J075(2)S |
| 75 | 0.47 | A | T110A474K075A(3) | 0.3 | 2 | 2394 | 2634 | 2874 | 3114 | 4257 | 6257 | 7257 | 8257 | T212A474K075(2)S |
| 75 | 0.47 | A | T110A474M075A(3) | 0.3 | 2 | 2395 | 2635 | 2875 | 3115 | 4258 | 6258 | 7258 | 8258 | T212A474M075(2)S |
| 75 | 0.56 | A | T110A564J075A(3) | 0.3 | 2 | 5104 | 5304 | 5504 | 5704 | 4259 | 6259 | 7259 | 8259 | T212A564J075(2)S |
| 75 | 0.56 | A | T110A564K075A(3) | 0.3 | 2 | 2396 | 2636 | 2876 | 3116 | 4260 | 6260 | 7260 | 8260 | T212A564K075(2)S |
| 75 | 0.56 | A | T110A564M075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 0.68 | A | T110A684J075A(3) | 0.3 | 2 | 5105 | 5305 | 5505 | 5705 | 4261 | 6261 | 7261 | 8261 | T212A684J075(2)S |
| 75 | 0.68 | A | T110A684K075A(3) | 0.3 | 2 | 2397 | 2637 | 2877 | 3117 | 4262 | 6262 | 7262 | 8262 | T212A684K075(2)S |
| 75 | 0.68 | A | T110A684M075A(3) | 0.3 | 2 | 2398 | 2638 | 2878 | 3118 | 4263 | 6263 | 7263 | 8263 | T212A684M075(2)S |
| 75 | 0.82 | B | T110B824J075A(3) | 0.3 | 2 | 5106 | 5306 | 5506 | 5706 | 4264 | 6264 | 7264 | 8264 | T212B824J075(2)S |
| 75 | 0.82 | B | T110B824K075A(3) | 0.3 | 2 | 2399 | 2639 | 2879 | 3119 | 4265 | 6265 | 7265 | 8265 | T212B824K075(2)S |
| 75 | 0.82 | B | T110B824M075A(3) | 0.3 | 2 | | | | | | | | | |
| 75 | 1.0 | B | T110B105J075A(3) | 0.3 | 2 | 5107 | 5307 | 5507 | 5707 | 4266 | 6266 | 7266 | 8266 | T212B105J075(2)S |
| 75 | 1.0 | B | T110B105K075A(3) | 0.3 | 2 | 2400 | 2640 | 2880 | 3120 | 4267 | 6267 | 7267 | 8267 | T212B105K075(2)S |
| 75 | 1.0 | B | T110B105M075A(3) | 0.3 | 2 | 2401 | 2641 | 2881 | 3121 | 4268 | 6268 | 7268 | 8268 | T212B105M075(2)S |
| 75 | 1.2 | B | T110B125J075A(3) | 0.3 | 4 | 5108 | 5308 | 5508 | 5708 | 4269 | 6269 | 7269 | 8269 | T212B125J075(2)S |
| 75 | 1.2 | B | T110B125K075A(3) | 0.3 | 4 | 2402 | 2642 | 2882 | 3122 | 4270 | 6270 | 7270 | 8270 | T212B125K075(2)S |
| 75 | 1.2 | B | T110B125M075A(3) | 0.3 | 4 | | | | | | | | | |
| 75 | 1.5 | B | T110B155J075A(3) | 0.6 | 4 | 5109 | 5309 | 5509 | 5709 | 4271 | 6271 | 7271 | 8271 | T212B155J075(2)S |
| 75 | 1.5 | B | T110B155K075A(3) | 0.6 | 4 | 2403 | 2643 | 2883 | 3123 | 4272 | 6272 | 7272 | 8272 | T212B155K075(2)S |
| 75 | 1.5 | B | T110B155M075A(3) | 0.6 | 4 | 2404 | 2644 | 2884 | 3124 | 4273 | 6273 | 7273 | 8273 | T212B155M075(2)S |
| 75 | 1.8 | B | T110B185J075A(3) | 0.7 | 4 | 5110 | 5310 | 5510 | 5710 | 4274 | 6274 | 7274 | 8274 | T212B185J075(2)S |
| 75 | 1.8 | B | T110B185K075A(3) | 0.7 | 4 | 2405 | 2645 | 2885 | 3125 | 4275 | 6275 | 7275 | 8275 | T212B185K075(2)S |
| 75 | 1.8 | B | T110B185M075A(3) | 0.7 | 4 | | | | | | | | | |
| 75 | 2.2 | B | T110B225J075A(3) | 0.8 | 4 | 5111 | 5311 | 5511 | 5711 | 4276 | 6276 | 7276 | 8276 | T212B225J075(2)S |
| 75 | 2.2 | B | T110B225K075A(3) | 0.8 | 4 | 2406 | 2646 | 2886 | 3126 | 4277 | 6277 | 7277 | 8277 | T212B225K075(2)S |
| 75 | 2.2 | B | T110B225M075A(3) | 0.8 | 4 | 2407 | 2647 | 2887 | 3127 | 4278 | 6278 | 7278 | 8278 | T212B225M075(2)S |
| 75 | 2.7 | B | T110B275J075A(3) | 1.0 | 4 | 5112 | 5312 | 5512 | 5712 | 4279 | 6279 | 7279 | 8279 | T212B275J075(2)S |
| 75 | 2.7 | B | T110B275K075A(3) | 1.0 | 4 | 2408 | 2648 | 2888 | 3128 | 4280 | 6280 | 7280 | 8280 | T212B275K075(2)S |
| 75 | 2.7 | B | T110B275M075A(3) | 1.2 | 4 | | | | | | | | | |
| 75 | 3.3 | B | T110B335J075A(3) | 1.2 | 4 | 5113 | 5313 | 5513 | 5713 | 4281 | 6281 | 7281 | 8281 | T212B335J075(2)S |
| 75 | 3.3 | B | T110B335K075A(3) | 1.2 | 4 | 2409 | 2649 | 2889 | 3129 | 4282 | 6282 | 7282 | 8282 | T212B335K075(2)S |
| 75 | 3.3 | B | T110B335M075A(3) | 1.2 | 4 | 2410 | 2650 | 2890 | 3130 | 4283 | 6283 | 7283 | 8283 | T212B335M075(2)S |
| 75 | 3.9 | B | T110B395J075A(3) | 1.5 | 4 | 5114 | 5314 | 5514 | 5714 | 4284 | 6284 | 7284 | 8284 | T212B395J075(2)S |
| 75 | 3.9 | B | T110B395K075A(3) | 1.5 | 4 | 2411 | 2651 | 2891 | 3131 | 4285 | 6285 | 7285 | 8285 | T212B395K075(2)S |
| 75 | 3.9 | B | T110B395M075A(3) | 1.5 | 4 | | | | | | | | | |
| 75 | 4.7 | C | T110C475J075A(3) | 3.0 | 4 | 5115 | 5315 | 5515 | 5715 | 4286 | 6286 | 7286 | 8286 | T212C475J075(2)S |
| 75 | 4.7 | C | T110C475K075A(3) | 3.0 | 4 | 2412 | 2652 | 2892 | 3132 | 4287 | 6287 | 7287 | 8287 | T212C475K075(2)S |
| 75 | 4.7 | C | T110C475M075A(3) | 3.0 | 4 | 2413 | 2653 | 2893 | 3133 | 4288 | 6288 | 7288 | 8288 | T212C475M075(2)S |
| 75 | 5.6 | C | T110C565J075A(3) | 3.0 | 4 | 5116 | 5316 | 5516 | 5716 | 4289 | 6289 | 7289 | 8289 | T212C565J075(2)S |
| 75 | 5.6 | C | T110C565K075A(3) | 3.0 | 4 | 2414 | 2654 | 2894 | 3134 | 4290 | 6290 | 7290 | 8290 | T212C565K075(2)S |
| 75 | 5.6 | C | T110C565M075A(3) | 3.0 | 4 | | | | | | | | | |
| 75 | 6.8 | C | T110C685J075A(3) | 5.0 | 4 | 5117 | 5317 | 5517 | 5717 | 4291 | 6291 | 7291 | 8291 | T212C685J075(2)S |
| 75 | 6.8 | C | T110C685K075A(3) | 5.0 | 4 | 2415 | 2655 | 2895 | 3135 | 4292 | 6292 | 7292 | 8292 | T212C685K075(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 75 | 6.8 | C | T110C685M075A(3) | 5.0 | 4 | 2416 | 2656 | 2896 | 3136 | 4293 | 6293 | 7293 | 8293 | T212C685M075(2)S |
| 75 | 8.2 | C | T110C825J075A(3) | 5.0 | 4 | 5118 | 5318 | 5518 | 5718 | 4294 | 6294 | 7294 | 8294 | T212C825J075(2)S |
| 75 | 8.2 | C | T110C825K075A(3) | 5.0 | 4 | 2417 | 2657 | 2897 | 3137 | 4295 | 6295 | 7295 | 8295 | T212C825K075(2)S |
| 75 | 8.2 | C | T110C825M075A(3) | 5.0 | 4 | | | | | | | | | |
| 75 | 10.0 | C | T110C106J075A(3) | 5.0 | 4 | 5119 | 5319 | 5519 | 5719 | 4296 | 6296 | 7296 | 8296 | T212C106J075(2)S |
| 75 | 10.0 | C | T110C106K075A(3) | 5.0 | 4 | 2418 | 2658 | 2898 | 3138 | 4297 | 6297 | 7297 | 8297 | T212C106K075(2)S |
| 75 | 10.0 | C | T110C106M075A(3) | 5.0 | 4 | 2419 | 2659 | 2899 | 3139 | 4298 | 6298 | 7298 | 8298 | T212C106M075(2)S |
| 75 | 12.0 | D | T110D126J075A(3) | 5.0 | 4 | 5120 | 5320 | 5520 | 5720 | 4299 | 6299 | 7299 | 8299 | T212D126J075(2)S |
| 75 | 12.0 | D | T110D126K075A(3) | 5.0 | 4 | 2420 | 2660 | 2900 | 3140 | 4300 | 6300 | 7300 | 8300 | T212D126K075(2)S |
| 75 | 12.0 | D | T110D126M075A(3) | 5.0 | 4 | | | | | | | | | |
| 75 | 15.0 | D | T110D156J075A(3) | 7.0 | 4 | 5121 | 5321 | 5521 | 5721 | 4301 | 6301 | 7301 | 8301 | T212D156J075(2)S |
| 75 | 15.0 | D | T110D156K075A(3) | 7.0 | 4 | 2421 | 2661 | 2901 | 3141 | 4302 | 6302 | 7302 | 8302 | T212D156K075(2)S |
| 75 | 15.0 | D | T110D156M075A(3) | 7.0 | 4 | 2422 | 2662 | 2902 | 3142 | 4303 | 6303 | 7303 | 8303 | T212D156M075(2)S |
| 100 | 0.0047 | A | T110A472J100A(3) | 0.3 | 2 | 5122 | 5322 | 5522 | 5722 | 4304 | 6304 | 7304 | * | T212A472J100(2)S |
| 100 | 0.0047 | A | T110A472K100A(3) | 0.3 | 2 | 2423 | 2663 | 2903 | 3143 | 4305 | 6305 | 7305 | * | T212A472K100(2)S |
| 100 | 0.0047 | A | T110A472M100A(3) | 0.3 | 2 | 2424 | 2664 | 2904 | 3144 | 4306 | 6306 | 7306 | * | T212A472M100(2)S |
| 100 | 0.0056 | A | T110A562J100A(3) | 0.3 | 2 | 5123 | 5323 | 5523 | 5723 | 4307 | 6307 | 7307 | * | T212A562J100(2)S |
| 100 | 0.0056 | A | T110A562K100A(3) | 0.3 | 2 | 2425 | 2665 | 2905 | 3145 | 4308 | 6308 | 7308 | * | T212A562K100(2)S |
| 100 | 0.0056 | A | T110A562M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.0068 | A | T110A682J100A(3) | 0.3 | 2 | 5124 | 5324 | 5524 | 5724 | 4309 | 6309 | 7309 | * | T212A682J100(2)S |
| 100 | 0.0068 | A | T110A682K100A(3) | 0.3 | 2 | 2426 | 2666 | 2906 | 3146 | 4310 | 6310 | 7310 | * | T212A682K100(2)S |
| 100 | 0.0068 | A | T110A682M100A(3) | 0.3 | 2 | 2427 | 2667 | 2907 | 3147 | 4311 | 6311 | 7311 | * | T212A682M100(2)S |
| 100 | 0.0082 | A | T110A822J100A(3) | 0.3 | 2 | 5125 | 5325 | 5525 | 5725 | 4312 | 6312 | 7312 | * | T212A822J100(2)S |
| 100 | 0.0082 | A | T110A822K100A(3) | 0.3 | 2 | 2428 | 2668 | 2908 | 3148 | 4313 | 6313 | 7313 | * | T212A822K100(2)S |
| 100 | 0.0082 | A | T110A822M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.01 | A | T110A103J100A(3) | 0.3 | 2 | 5126 | 5326 | 5526 | 5726 | 4314 | 6314 | 7314 | * | T212A103J100(2)S |
| 100 | 0.01 | A | T110A103K100A(3) | 0.3 | 2 | 2429 | 2669 | 2909 | 3149 | 4315 | 6315 | 7315 | * | T212A103K100(2)S |
| 100 | 0.01 | A | T110A103M100A(3) | 0.3 | 2 | 2430 | 2670 | 2910 | 3150 | 4316 | 6316 | 7316 | * | T212A103M100(2)S |
| 100 | 0.012 | A | T110A123J100A(3) | 0.3 | 2 | 5127 | 5327 | 5527 | 5727 | 4317 | 6317 | 7317 | * | T212A123J100(2)S |
| 100 | 0.012 | A | T110A123K100A(3) | 0.3 | 2 | 2431 | 2671 | 2911 | 3151 | 4318 | 6318 | 7318 | * | T212A123K100(2)S |
| 100 | 0.012 | A | T110A123M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.015 | A | T110A153J100A(3) | 0.3 | 2 | 5128 | 5328 | 5528 | 5728 | 4319 | 6319 | 7319 | * | T212A153J100(2)S |
| 100 | 0.015 | A | T110A153K100A(3) | 0.3 | 2 | 2432 | 2672 | 2912 | 3152 | 4320 | 6320 | 7320 | * | T212A153K100(2)S |
| 100 | 0.015 | A | T110A153M100A(3) | 0.3 | 2 | 2433 | 2673 | 2913 | 3153 | 4321 | 6321 | 7321 | * | T212A153M100(2)S |
| 100 | 0.018 | A | T110A183J100A(3) | 0.3 | 2 | 5129 | 5329 | 5529 | 5729 | 4322 | 6322 | 7322 | * | T212A183J100(2)S |
| 100 | 0.018 | A | T110A183K100A(3) | 0.3 | 2 | 2434 | 2674 | 2914 | 3154 | 4323 | 6323 | 7323 | * | T212A183K100(2)S |
| 100 | 0.018 | A | T110A183M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.022 | A | T110A223J100A(3) | 0.3 | 2 | 5130 | 5330 | 5530 | 5730 | 4324 | 6324 | 7324 | * | T212A223J100(2)S |
| 100 | 0.022 | A | T110A223K100A(3) | 0.3 | 2 | 2435 | 2675 | 2915 | 3155 | 4325 | 6325 | 7325 | * | T212A223K100(2)S |
| 100 | 0.022 | A | T110A223M100A(3) | 0.3 | 2 | 2436 | 2676 | 2916 | 3156 | 4326 | 6326 | 7326 | * | T212A223M100(2)S |
| 100 | 0.027 | A | T110A273J100A(3) | 0.3 | 2 | 5131 | 5331 | 5531 | 5731 | 4327 | 6327 | 7327 | * | T212A273J100(2)S |
| 100 | 0.027 | A | T110A273K100A(3) | 0.3 | 2 | 2437 | 2677 | 2917 | 3157 | 4328 | 6328 | 7328 | * | T212A273K100(2)S |
| 100 | 0.027 | A | T110A273M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.033 | A | T110A333J100A(3) | 0.3 | 2 | 5132 | 5332 | 5532 | 5732 | 4329 | 6329 | 7329 | * | T212A333J100(2)S |
| 100 | 0.033 | A | T110A333K100A(3) | 0.3 | 2 | 2438 | 2678 | 2918 | 3158 | 4330 | 6330 | 7330 | * | T212A333K100(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | KEMET Equivalent Military |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 100 | 0.033 | A | T110A333M100A(3) | 0.3 | 2 | 2439 | 2679 | 2919 | 3159 | 4331 | 6331 | 7331 | * | T212A333M100(2)S |
| 100 | 0.039 | A | T110A393J100A(3) | 0.3 | 2 | 5133 | 5333 | 5533 | 5733 | 4332 | 6332 | 7332 | * | T212A393J075(2)S |
| 100 | 0.039 | A | T110A393K100A(3) | 0.3 | 2 | 2440 | 2680 | 2920 | 3160 | 4333 | 6333 | 7333 | * | T212A393K075(2)S |
| 100 | 0.039 | A | T110A393M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.047 | A | T110A473J100A(3) | 0.3 | 2 | 5134 | 5334 | 5534 | 5734 | 4334 | 6334 | 7334 | * | T212A473J100(2)S |
| 100 | 0.047 | A | T110A473K100A(3) | 0.3 | 2 | 2441 | 2681 | 2921 | 3161 | 4335 | 6335 | 7335 | * | T212A473K100(2)S |
| 100 | 0.047 | A | T110A473M100A(3) | 0.3 | 2 | 2442 | 2682 | 2922 | 3162 | 4336 | 6336 | 7336 | * | T212A473M100(2)S |
| 100 | 0.056 | A | T110A563J100A(3) | 0.3 | 2 | 5135 | 5335 | 5535 | 5735 | 4337 | 6337 | 7337 | * | T212A563J100(2)S |
| 100 | 0.056 | A | T110A563K100A(3) | 0.3 | 2 | 2443 | 2683 | 2923 | 3163 | 4338 | 6338 | 7338 | * | T212A563K100(2)S |
| 100 | 0.056 | A | T110A563M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.068 | A | T110A683J100A(3) | 0.3 | 2 | 5136 | 5336 | 5536 | 5736 | 4339 | 6339 | 7339 | * | T212A683J100(2)S |
| 100 | 0.068 | A | T110A683K100A(3) | 0.3 | 2 | 2444 | 2684 | 2924 | 3164 | 4340 | 6340 | 7340 | * | T212A683K100(2)S |
| 100 | 0.068 | A | T110A683M100A(3) | 0.3 | 2 | 2445 | 2685 | 2925 | 3165 | 4341 | 6341 | 7341 | * | T212A683M100(2)S |
| 100 | 0.082 | A | T110A823J100A(3) | 0.3 | 2 | 5137 | 5337 | 5537 | 5737 | 4342 | 6342 | 7342 | * | T212A823J100(2)S |
| 100 | 0.082 | A | T110A823K100A(3) | 0.3 | 2 | 2446 | 2686 | 2926 | 3166 | 4343 | 6343 | 7343 | * | T212A823K100(2)S |
| 100 | 0.082 | A | T110A823M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.1 | A | T110A104J100A(3) | 0.3 | 2 | 5138 | 5338 | 5538 | 5738 | 4344 | 6344 | 7344 | * | T212A104J100(2)S |
| 100 | 0.1 | A | T110A104K100A(3) | 0.3 | 2 | 2447 | 2687 | 2927 | 3167 | 4345 | 6345 | 7345 | * | T212A104K100(2)S |
| 100 | 0.1 | A | T110A104M100A(3) | 0.3 | 2 | 2448 | 2688 | 2928 | 3168 | 4346 | 6346 | 7346 | * | T212A104M100(2)S |
| 100 | 0.12 | A | T110A124J100A(3) | 0.3 | 2 | 5139 | 5339 | 5539 | 5739 | 4347 | 6347 | 7347 | * | T212A124J100(2)S |
| 100 | 0.12 | A | T110A124K100A(3) | 0.3 | 2 | 2449 | 2689 | 2929 | 3169 | 4348 | 6348 | 7348 | * | T212A124K100(2)S |
| 100 | 0.12 | A | T110A124M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.15 | A | T110A154J100A(3) | 0.3 | 2 | 5140 | 5340 | 5540 | 5740 | 4349 | 6349 | 7349 | * | T212A154J100(2)S |
| 100 | 0.15 | A | T110A154K100A(3) | 0.3 | 2 | 2450 | 2690 | 2930 | 3170 | 4350 | 6350 | 7350 | * | T212A154K100(2)S |
| 100 | 0.15 | A | T110A154M100A(3) | 0.3 | 2 | 2451 | 2691 | 2931 | 3171 | 4351 | 6351 | 7351 | * | T212A154M100(2)S |
| 100 | 0.18 | A | T110A184J100A(3) | 0.3 | 2 | 5141 | 5341 | 5541 | 5741 | 4352 | 6352 | 7352 | * | T212A184J100(2)S |
| 100 | 0.18 | A | T110A184K100A(3) | 0.3 | 2 | 2452 | 2692 | 2932 | 3172 | 4353 | 6353 | 7353 | * | T212A184K100(2)S |
| 100 | 0.18 | A | T110A184M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.22 | A | T110A224J100A(3) | 0.3 | 2 | 5142 | 5342 | 5542 | 5742 | 4354 | 6354 | 7354 | * | T212A224J100(2)S |
| 100 | 0.22 | A | T110A224K100A(3) | 0.3 | 2 | 2453 | 2693 | 2933 | 3173 | 4355 | 6355 | 7355 | * | T212A224K100(2)S |
| 100 | 0.22 | A | T110A224M100A(3) | 0.3 | 2 | 2454 | 2694 | 2934 | 3174 | 4356 | 6356 | 7356 | * | T212A224M100(2)S |
| 100 | 0.27 | A | T110A274J100A(3) | 0.3 | 2 | 5143 | 5343 | 5543 | 5743 | 4357 | 6357 | 7357 | * | T212A274J100(2)S |
| 100 | 0.27 | A | T110A274K100A(3) | 0.3 | 2 | 2455 | 2695 | 2935 | 3175 | 4358 | 6358 | 7358 | * | T212A274K100(2)S |
| 100 | 0.27 | A | T110A274M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.33 | A | T110A334J100A(3) | 0.3 | 2 | 5144 | 5344 | 5544 | 5744 | 4359 | 6359 | 7359 | * | T212A334J100(2)S |
| 100 | 0.33 | A | T110A334K100A(3) | 0.3 | 2 | 2456 | 2696 | 2936 | 3176 | 4360 | 6360 | 7360 | * | T212A334K100(2)S |
| 100 | 0.33 | A | T110A334M100A(3) | 0.3 | 2 | 2457 | 2697 | 2937 | 3177 | 4361 | 6361 | 7361 | * | T212A334M100(2)S |
| 100 | 0.39 | A | T110A394J100A(3) | 0.3 | 2 | 5145 | 5345 | 5545 | 5745 | 4362 | 6362 | 7362 | * | T212A394J100(2)S |
| 100 | 0.39 | A | T110A394K100A(3) | 0.3 | 2 | 2458 | 2698 | 2938 | 3178 | 4363 | 6363 | 7363 | * | T212A394K100(2)S |
| 100 | 0.39 | A | T110A394M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.47 | A | T110A474J100A(3) | 0.3 | 2 | 5146 | 5346 | 5546 | 5746 | 4364 | 6364 | 7364 | * | T212A474J100(2)S |
| 100 | 0.47 | A | T110A474K100A(3) | 0.3 | 2 | 2459 | 2699 | 2939 | 3179 | 4365 | 6365 | 7365 | * | T212A474K100(2)S |
| 100 | 0.47 | A | T110A474M100A(3) | 0.3 | 2 | 2460 | 2700 | 2940 | 3180 | 4366 | 6366 | 7366 | * | T212A474M100(2)S |
| 100 | 0.56 | A | T110A564J100A(3) | 0.3 | 2 | 5147 | 5347 | 5547 | 5747 | 4367 | 6367 | 7367 | * | T212A564J100(2)S |
| 100 | 0.56 | A | T110A564K100A(3) | 0.3 | 2 | 2461 | 2701 | 2941 | 3181 | 4368 | 6368 | 7368 | * | T212A564K100(2)S |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 100 | 0.56 | A | T110A564M100A(3) | 0.3 | 2 | | | | | | | | * | |
| 100 | 0.68 | B | T110B684J100A(3) | 0.3 | 2 | 5148 | 5348 | 5548 | 5748 | 4369 | 6369 | 7369 | * | T212B684J100(2)S |
| 100 | 0.68 | B | T110B684K100A(3) | 0.3 | 2 | 2462 | 2702 | 2942 | 3182 | 4370 | 6370 | 7370 | * | T212B684K100(2)S |
| 100 | 0.68 | B | T110B684M100A(3) | 0.3 | 2 | 2463 | 2703 | 2943 | 3183 | 4371 | 6371 | 7371 | * | T212B684M100(2)S |
| 100 | 0.82 | B | T110B824J100A(3) | 0.4 | 2 | 5149 | 5349 | 5549 | 5749 | 4372 | 6372 | 7372 | * | T212B824J100(2)S |
| 100 | 0.82 | B | T110B824K100A(3) | 0.4 | 2 | 2464 | 2704 | 2944 | 3184 | 4373 | 6373 | 7373 | * | T212B824K100(2)S |
| 100 | 0.82 | B | T110B824M100A(3) | 0.4 | 2 | | | | | | | | * | |
| 100 | 1.0 | B | T110B105J100A(3) | 0.5 | 2 | 5150 | 5350 | 5550 | 5750 | 4374 | 6374 | 7374 | * | T212B105J100(2)S |
| 100 | 1.0 | B | T110B105K100A(3) | 0.5 | 2 | 2465 | 2705 | 2945 | 3185 | 4375 | 6375 | 7375 | * | T212B105K100(2)S |
| 100 | 1.0 | B | T110B105M100A(3) | 0.5 | 2 | 2466 | 2706 | 2946 | 3186 | 4376 | 6376 | 7376 | * | T212B105M100(2)S |
| 100 | 1.2 | B | T110B125J100A(3) | 0.5 | 3 | 5151 | 5351 | 5551 | 5751 | 4377 | 6377 | 7377 | * | T212B125J100(2)S |
| 100 | 1.2 | B | T110B125K100A(3) | 0.5 | 3 | 2467 | 2707 | 2947 | 3187 | 4378 | 6378 | 7378 | * | T212B125K100(2)S |
| 100 | 1.2 | B | T110B125M100A(3) | 0.5 | 3 | | | | | | | | * | |
| 100 | 1.5 | B | T110B155J100A(3) | 0.7 | 3 | 5152 | 5352 | 5552 | 5752 | 4379 | 6379 | 7379 | * | T212B155J100(2)S |
| 100 | 1.5 | B | T110B155K100A(3) | 0.7 | 3 | 2468 | 2708 | 2948 | 3188 | 4380 | 6380 | 7380 | * | T212B155K100(2)S |
| 100 | 1.5 | B | T110B155M100A(3) | 0.7 | 3 | 2469 | 2709 | 2949 | 3189 | 4381 | 6381 | 7381 | * | T212B155M100(2)S |
| 100 | 1.8 | B | T110B185J100A(3) | 0.7 | 3 | 5153 | 5353 | 5553 | 5753 | 4382 | 6382 | 7382 | * | T212B185J100(2)S |
| 100 | 1.8 | B | T110B185K100A(3) | 0.7 | 3 | 2470 | 2710 | 2950 | 3190 | 4383 | 6383 | 7383 | * | T212B185K100(2)S |
| 100 | 1.8 | B | T110B185M100A(3) | 0.7 | 3 | | | | | | | | * | |
| 100 | 2.2 | B | T110B225J100A(3) | 0.9 | 3 | 5154 | 5354 | 5554 | 5754 | 4384 | 6384 | 7384 | * | T212B225J100(2)S |
| 100 | 2.2 | B | T110B225K100A(3) | 0.9 | 3 | 2471 | 2711 | 2951 | 3191 | 4385 | 6385 | 7385 | * | T212B225K100(2)S |
| 100 | 2.2 | B | T110B225M100A(3) | 0.9 | 3 | 2472 | 2712 | 2952 | 3192 | 4386 | 6386 | 7386 | * | T212B225M100(2)S |
| 100 | 2.7 | B | T110B275J100A(3) | 1.1 | 3 | 5155 | 5355 | 5555 | 5755 | 4387 | 6387 | 7387 | * | T212B275J100(2)S |
| 100 | 2.7 | B | T110B275K100A(3) | 1.1 | 3 | 2473 | 2713 | 2953 | 3193 | 4388 | 6388 | 7388 | * | T212B275K100(2)S |
| 100 | 2.7 | B | T110B275M100A(3) | 1.1 | 3 | | | | | | | | * | |
| 100 | 3.3 | C | T110C335J100A(3) | 1.5 | 3 | 5156 | 5356 | 5556 | 5756 | 4389 | 6389 | * | * | T212C335J100(2)S |
| 100 | 3.3 | C | T110C335K100A(3) | 1.5 | 3 | 5157 | 5357 | 5557 | 5757 | 4390 | 6390 | * | * | T212C335K100(2)S |
| 100 | 3.3 | C | T110C335M100A(3) | 1.5 | 3 | 5158 | 5358 | 5558 | 5758 | 4391 | 6391 | * | * | T212C335M100(2)S |
| 100 | 3.9 | C | T110C395J100A(3) | 1.5 | 3 | 5159 | 5359 | 5559 | 5759 | 4392 | 6392 | * | * | T212C395J100(2)S |
| 100 | 3.9 | C | T110C395K100A(3) | 1.5 | 3 | 5160 | 5360 | 5560 | 5760 | 4393 | 6393 | * | * | T212C395K100(2)S |
| 100 | 4.7 | C | T110C475J100A(3) | 2.5 | 3 | 5161 | 5361 | 5561 | 5761 | 4394 | 6394 | * | * | T212C475J100(2)S |
| 100 | 4.7 | C | T110C475K100A(3) | 2.5 | 3 | 5162 | 5362 | 5562 | 5762 | 4395 | 6395 | * | * | T212C475K100(2)S |
| 100 | 4.7 | C | T110C475M100A(3) | 2.5 | 3 | 5163 | 5363 | 5563 | 5763 | 4396 | 6396 | * | * | T212C475M100(2)S |
| 100 | 5.6 | C | T110C565J100A(3) | 2.5 | 3 | 5164 | 5364 | 5564 | 5764 | 4397 | 6397 | * | * | T212C565J100(2)S |
| 100 | 5.6 | C | T110C565K100A(3) | 2.5 | 3 | 5165 | 5365 | 5565 | 5765 | 4398 | 6398 | * | * | T212C565K100(2)S |
| 100 | 6.80 | C | T110C685J100A(3) | 2.5 | 3 | 5166 | 5366 | 5566 | 5766 | 4399 | 6399 | * | * | T212C685J100(2)S |
| 100 | 6.80 | C | T110C685K100A(3) | 2.5 | 3 | 5167 | 5367 | 5567 | 5767 | 4400 | 6400 | * | * | T212C685K100(2)S |
| 100 | 6.80 | C | T110C685M100A(3) | 2.5 | 3 | 5168 | 5368 | 5568 | 5768 | 4401 | 6401 | * | * | T212C685M100(2)S |
| 100 | 8.20 | D | T110D825(1)100A(3) | 5.0 | 3 | | | | | | | | | |
| 100 | 10.0 | D | T110D106(1)100A(3) | 5.0 | 3 | | | | | | | | | |
| 125 | 0.0047 | A | T110A472(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.0056 | A | T110A562(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.0068 | A | T110A682(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.0082 | A | T110A822(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.01 | A | T110A103(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Table 1 – Ratings & Part Number Reference cont.

| Rated Voltage | Rated Cap | Case Size Code | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Dash Number Reference | | | | | | | | KEMET Equivalent Military |
| | | | | | | Failure Rate Level (%/1,000 hours) | | | | | | | | |
| | | | | | | MIL–PRF–39003/1K | | | | MIL–PRF–39003/1K | | | | |
| | | | | | | Exponential | | | | Graded | | | | |
| (V) 85°C | µF | | (See below for part options) | µA at 25°C Max/5 Minutes | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| 125 | 0.012 | A | T110A123(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.015 | A | T110A153(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.018 | A | T110A183(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.022 | A | T110A223(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.027 | A | T110A273(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.033 | A | T110A333(1)125A(3) | 0.5 | 3 | | | | | | | | | |
| 125 | 0.039 | A | T110A393(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.047 | A | T110A473(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.056 | A | T110A563(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.068 | A | T110A683(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.082 | A | T110A823(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.1 | A | T110A104(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.12 | A | T110A124(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.15 | A | T110A154(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.18 | A | T110A184(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.22 | A | T110A224(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.27 | A | T110A274(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.33 | A | T110A334(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.39 | B | T110B394(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.47 | B | T110B474(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.56 | B | T110B564(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.68 | B | T110B684(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 0.82 | B | T110B824(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 1.0 | B | T110B105(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 1.2 | B | T110B125(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 1.5 | B | T110B155(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 1.8 | B | T110B185(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 2.2 | B | T110B225(1)125A(3) | 1.5 | 3 | | | | | | | | | |
| 125 | 2.7 | C | T110C275(1)125A(3) | 2.0 | 3 | | | | | | | | | |
| 125 | 3.3 | C | T110C335(1)125A(3) | 2.0 | 3 | | | | | | | | | |
| 125 | 3.9 | C | T110C395(1)125A(3) | 2.0 | 3 | | | | | | | | | |
| 125 | 4.7 | C | T110C475(1)125A(3) | 3.0 | 3 | | | | | | | | | |
| 125 | 5.6 | C | T110C565(1)125A(3) | 3.0 | 3 | | | | | | | | | |
| 125 | 6.8 | C | T110C685(1)125A(3) | 3.0 | 3 | | | | | | | | | |
| 125 | 8.2 | D | T110D825(1)125A(3) | 6.0 | 3 | | | | | | | | | |
| 125 | 10.0 | D | T110D106(1)125A(3) | 6.0 | 3 | | | | | | | | | |
| (V) 85°C | µF | Case Size Code | (see below for part options) | µA at 25°C Max/5 Minimum | 120 Hz Maximum | M (1.0) | P (0.1) | R (0.01) | S (0.001) | G (1.0) | B (0.1) | C (0.01) | D (0.001) | Part Number |
| Rated Voltage | Rated Cap | | KEMET Part Number | DC Leakage | DF % at 25°C | MIL–PRF–39003 (CSR13) Capacitors | | | | | | | | |

*(1) To complete KEMET Part Number, insert M for ±20%, K for ±10%, or J for 5%. Designates capacitance tolerance.*

*(2) To complete KEMET Part Number (T212), insert Graded failure rate – B for 0.1%/k hours, C for 0.01%/k hours, D for 0.001%/k hours, or G for 1%/k hours; or insert Exponential failure rate – M for 1%/k hours, P for 0.1%/k hours, R for 0.01%/k hours, or S for 0.001%/k hours. Designates Reliability Level.*

*(3) To complete KEMET Part Number (T110), insert Lead Material designator – S for Standard or T for 100% Matte Tin. Designates Termination finish.*

*Refer to Ordering Information for additional detail.*

## Ripple Current/Ripple Voltage

Permissible AC ripple voltage is related to the ESR of the capacitor and the power dissipation capabilities of a particular case size.
Thermal capacities for the various case sizes have been determined empirically and are listed below.

| Temperature Compensation Multipliers for Maximum Power Dissipation | | |
|---|---|---|
| T ≤ 25°C | T ≤ 85°C | T ≤ 125°C |
| 1.00 | 0.90 | 0.40 |

*T= Environmental Temperature*

Permissible AC ripple current can be determined by the following:

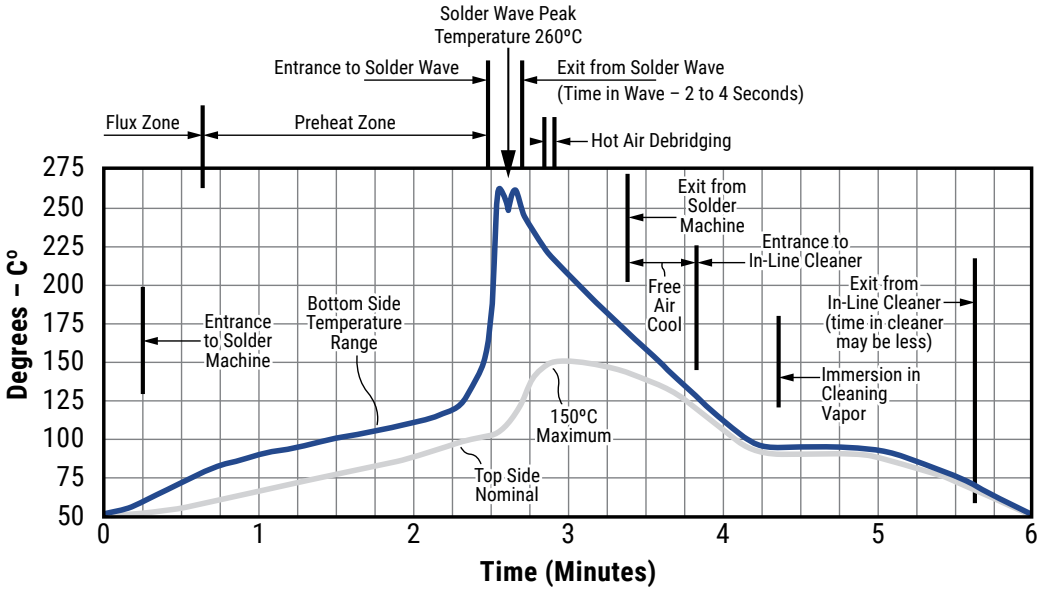
$$I(max) = Z\sqrt{P\ max/R}$$

*P max = maximum watts*
*R = ESR at specified frequency (ohms)*
*I = rms ripple current (amperes)*
*Z = capacitor impedance in ohms at the specified frequency*

| Case Size | Maximum Power Dissipation (P max) | T2XX |
|---|---|---|
| A | 0.09 | 0.070 |
| B | 0.100 | 0.090 |
| C | 0.125 | – |
| D | 0.180 | – |

*Maximum Power Dissipation: 25°C Ambient*

## Optimum Solder Wave Profile




## Reverse Voltage

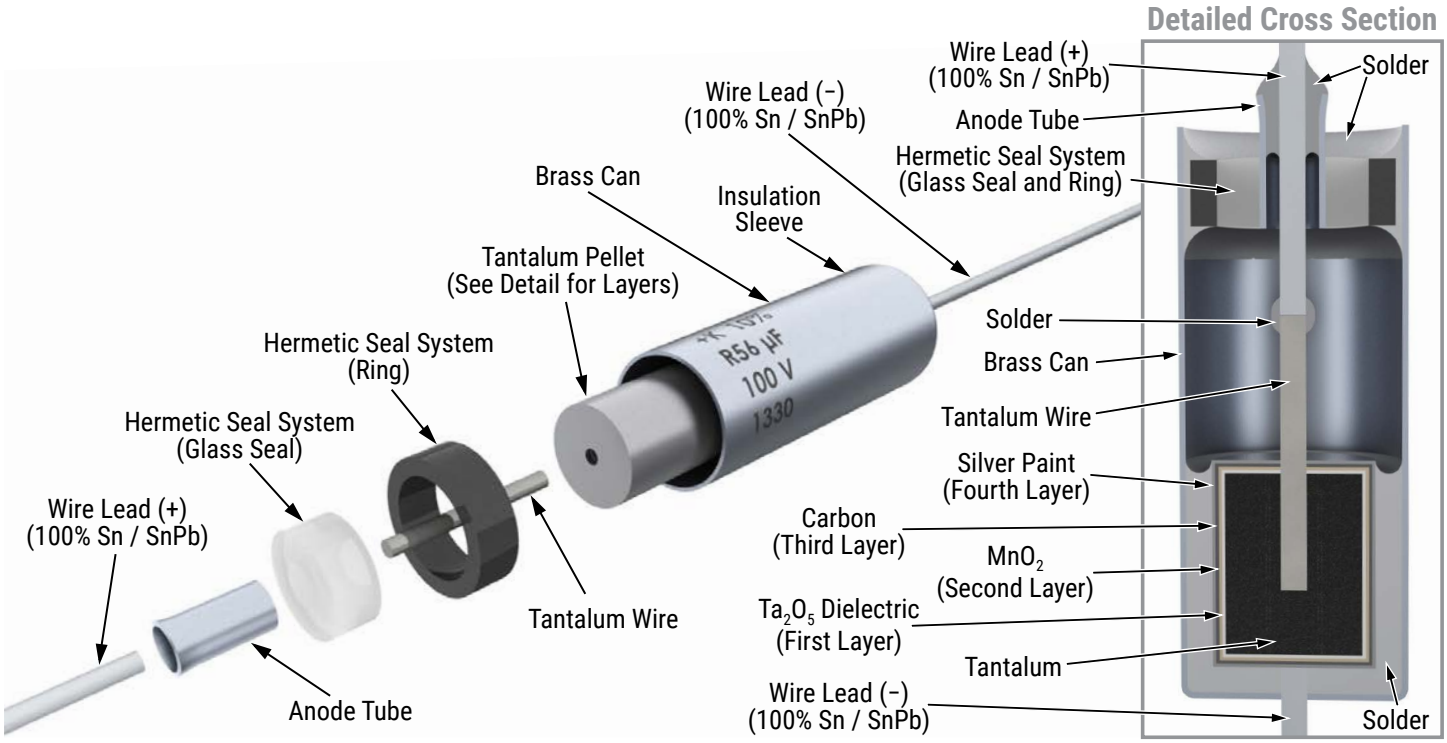
Although these are polar capacitors, some degree of transient voltage reversal is permissible, as seen below. The capacitors should not be operated continuously in reverse mode, even within these limits.

| Temperature | Pecentage of Rated Voltage |
|---|---|
| +25°C | 15 |
| +85°C | 5 |
| +125°C | 1 |

## Mounting

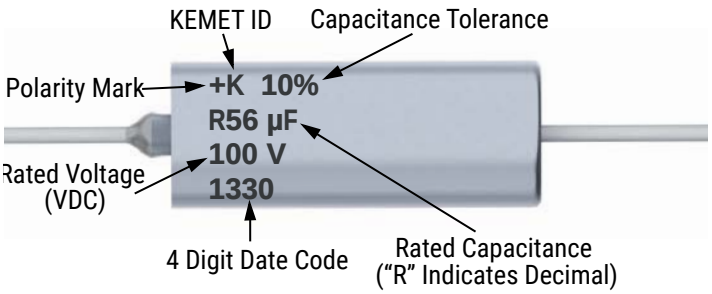
All encased capacitors will pass the Resistance to Soldering Heat Test of MIL–STD–202, Method 210, Condition C. This test simulates wave solder of topside board mount product. This demonstration of resistance to solder heat is in accordance with what is believed to be the industry standard. More severe treatment must be considered reflective of an improper soldering process. The above figure is a recommended solder wave profile for both axial and radial leaded solid tantalum capacitors.

## Construction

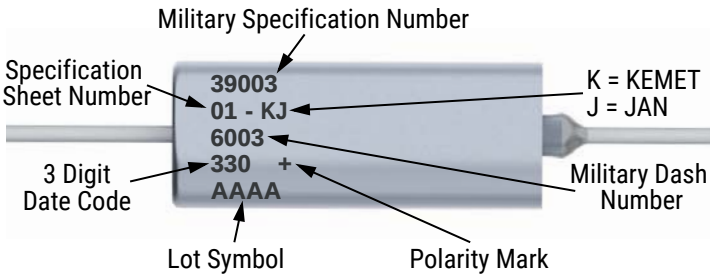


## Capacitor Marking

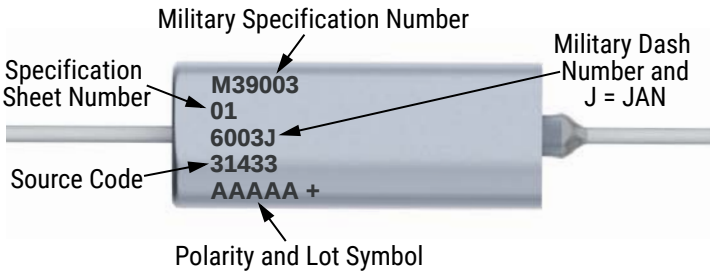
### T110



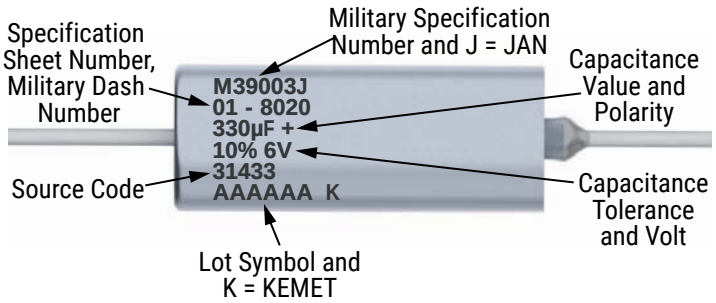

### T212 – A Case




### T212 – B Case




### T212 – C and D Case




| Date Code | 3 Digit | 4 Digit |
|---|---|---|
| Year | 9 = 2019<br>0 = 2020<br>1 = 2021<br>2 = 2022<br>3 = 2023 | 19 = 2019<br>20 = 2020<br>21 = 2021<br>22 = 2022<br>23 = 2023 |
| Week | 01 = 1st week of the year to<br>52 = 52nd week of the year | |

## Storage

Tantalum hermetically sealed capacitors should be stored in normal working environments. While the capacitors themselves are quite robust in other environments, solderability will be degraded by exposure to high temperatures, high humidity, corrosive atmospheres, and long term storage. In addition, packaging materials will be degraded by high temperature – reels may soften or warp and tape peel force may increase. KEMET recommends that maximum storage temperature not exceed 40°C and maximum storage humidity not exceed 60% relative humidity. Temperature fluctuations should be minimized to avoid condensation on the parts and atmospheres should be free of chlorine and sulphur bearing compounds. For optimized solderability capacitors stock should be used promptly, preferably within three years of receipt.

## Tape & Reel Packaging Information

KEMET offers standard reeling of Solid Tantalum Capacitors for automatic insertion or lead forming machines per EIA Specification RS–296E.

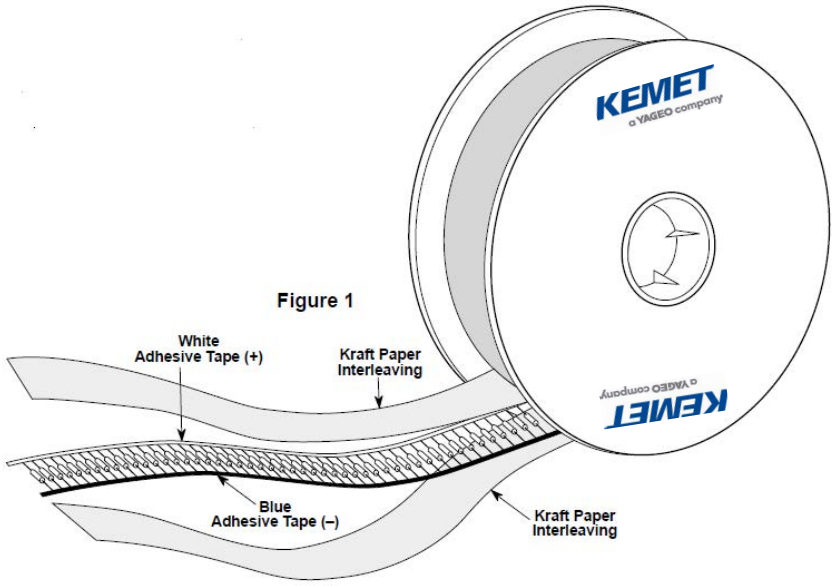
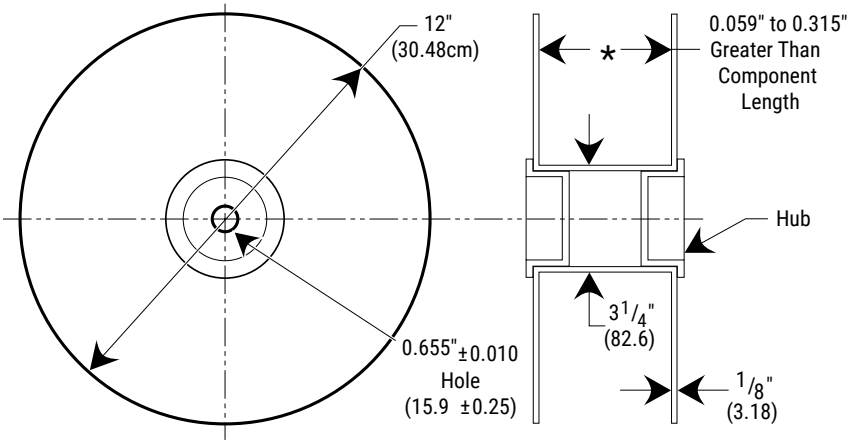



Figure 1

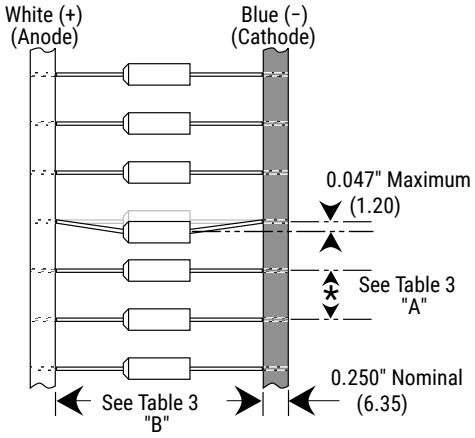
## Table 2 – Packaging Quantity

| Case Size | Standard Bulk Quantity | Standard Reel Quantity | Reel C-Spec | Ammo Pack Quantity | Ammo Pack C-Spec |
|---|---|---|---|---|---|
| A | 150/Box | 3,500 | C–7200 | 1,500 | C–7293 |
| B | 75/Box | 2,500 | C–7200 | 1,000 | Class I |
| C | 20/Tray | 500 | C–7200 | 250 | C–7442 |
| D | 20/Tray | 400 | C–7200 | 250 | Class II<br>C–7443<br>Class III |

## Figure 2




## Figure 3




## Table 3 – Tape Dimensions

Dimensions in Inches (& Millimeters)

| BODY DIAMETER | A PITCH ±0.020 (0.5) | B INSIDE TAPE SPACING ±0.059 (1.5) | | |
|---|---|---|---|---|
| | | Class | | |
| | | I | II | III |
| ≤ 0.197 (5.0) | 0.200 (5.0) | 2.063 (52.4) | 2.500 (63.5) | 2.874 (73) |
| 0.198 (5.0) to 0.394 (10.0) | 0.400 (10.0) | | | |

Capacitors are reeled so that positive leads are oriented as shown in Figure 3. Kraft paper (50 lbs. test minimum) is inserted between the layers of capacitors wound on reels for component pitch ≤ 0.200" sizes and corrugated paper (70 lbs. test minimum), single faced is inserted for component pitch ≥ 0.400" sizes. Capacitor lead length may extend only a maximum of 0.031" (0.8 mm) beyond the tape's edges. Capacitors are centered in a row between the two tapes and will deviate only ±0.031" (0.79 mm) from the row center.

Figures 1 and 2 show the KEMET standard chipboard tape reel.

A minimum of 36" (91.5 cm) leader tape is provided at each end of the reeled capacitors.

Universal splicing clips are used to connect the tape.

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